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June 13, 2011 Vol. 22 No. 12

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contents

ADVANCE FOR PHYSICAL THERAPY & REHAB MEDICINE VOL. 22 | NO. 12 | JUNE 13, 2011

[COVER STORY]

[FEATURED ARTICLES]

[MORE ARTICLES]

[DEPARTMENTS]

[COMING SOON]

Physician-owned physical therapy services (POPTS) are viewed by physical therapy advocates as a severe threat to PT autonomy. They argue that POPTS take clinical decision making out of the hands of treating physical therapists, and could potentially create referral-for-profit scenarios. Many states have adopted legislative barriers to POPTS relationships, but the legal battles continue nationwide. We examine the issue and present a current snapshot of POPTS in America.

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Jason thinks more companies should be amenable to employees bringing their kids to the workplace.

PT AND THE CITY
First Feature
Hours of hard work pay off with Lisa's first-ever *ADVANCE* cover story.

MORE PT BLOGS
- Tony Talks About PT Today
- Advance Perspectives
- A New PT Reality
- A Busy PT's Guide to Finding Balance
- Life of an SPTA
- Journey with a DPT Student
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[COLUMNS]

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By Brian W. Ferrie

Maryland

Disabled Sports USA Co-Sponsors Service Members Relay

Disabled Sports USA (DSUSA), Rockville, MD, announced in a May 25 press release that it will co-sponsor Team Naval Medical Center San Diego's participation in the 2011 Ski to Sea Race. A 100-mile, multi-sport competition that stretches from Mount Baker to Bellingham Bay, WA, the race was scheduled for May 29. Team members included two hospital therapists as well as six injured service people who have fought in the wars in Iraq and Afghanistan and are currently rehabilitating at the Naval Medical Center in San Diego, CA. The seven race legs included snowboarding, cross-country skiing, road bicycling, mountain biking, canoeing, kayaking, and running.

"Disabled Sports USA is pleased and honored to partner with Heisman Trophy Trust to provide an opportunity for our severely injured service members to rebuild their lives through extreme sports activities," said Kirk Bauer, JD, executive director of Disabled Sports USA and a disabled Vietnam veteran. "This is one of many examples of how far our wounded warriors have come in achieving independence through sports after their injuries."

Over 400 teams from around the world compete in this annual event, but only a few teams include athletes with disabilities. In previous years, the team has finished as high as 256th. This is the third consecutive year DSUSA has sponsored a wounded military team for Ski to Sea as part of its Warfighter Sports series. ■

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Advance Custom Promotions	www.advancecustompromotions.com	13
Advance Free Regional Virtual Job Fairs	www.advanceweb.com/events	33
Advance Healthcare Shop	www.advancehealthcareshop.com	43
Advance Online Education Fair	www.advanceweb.com/events	31
Advance Ongoing Webinar	www.advanceweb.com	28
Amramp	www.amcomsoft.com	35
Anatomical Concepts Incorporated	www.prafo.com	16
AriMed Pharmaceuticals	www.ari-med.com	23
B&B Marketing LLC	www.sacrowedgy.com	12
Balanced Body	www.balancedbody.com	32
Biogenesis Group	www.biogenesisgroup.com	16
Bioness Incorporated	www.bioness.com	7
Biotools Inc	www.biotoolscorp.com	41
Darco International	www.darcointernational.com	42
Des Moines University	www.dmu.edu/chs/ppdpt	44
DJO LLC	www.djoglobal.com	IFC
G W Heel Lift	www.gwheellift.com	24
Gerber Chairmates	www.gerberchairmates.com	23
Halo Rejuvinator	www.halorejuvenator.com/	11
Hands On Seminars Inc	www.HandsOnSeminars.com	47
Healthcare Providers Service Organization-HPSO	www.hpso.com	20
HealthLink Technologies	www.getintouch.us	11
HomeCEUConnection.com	www.RehabRally.com	49
Integrative Manual Therapy Solutions	www.IMTSglobal.com	46
Kinesio USA	www.kinesotaping.com	25
Kneebourne Therapeutic	www.eliteseat.com	BC
Lashaw Distributors Ltd	www.invertrac.com	9
LSVT Global	www.gleecoinc.com	52
Lymphedivas	www.lymphedivas.com	35
National Academy for Continuing Education	www.nationalacademy.com	51
Norton School of Lymphatic Therapy	www.NortonSchool.com	46
OccuPro LLC	www.occucare.net	17
OPTP	www.optp.com	12
Physiotec	www.physiotec.org	21
Pro Tec Athletics	www.injurybegone.com	15
Richmar	www.richmarweb.com	5
Simmons College	www.simmons.edu	49
Solo-Step	www.solo-step.com	8
Spinal Cord Injury Seminars Inc.	www.sciseminars.com	49
STOTT PILATES/Merrithew Corporation	www.stottpilates.com	30
SwimEx	www.swimex.com	39
The Home Depot U.S.A., Inc	www.homedepot.com/bathsafety	27
Therapy Team Exam Review Incorporated	www.therapyteam.com	52
The Vitality Depot	www.thevitalitydepot.com	IBC
Topical BioMedics	www.tpr4pain.com	42
TRX	www.fitnessanywhere.com	37
University of Michigan	www.umich.edu	48
University of St Augustine	www.usa.edu	45
Whitehall Manufacturing	www.whitehallmfg.com	42

PT 6/13/11

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Emphasis Should Not Rest on Credentials

To the Editor:

While I can certainly appreciate and respect the opinions of the PTs who argue against PTAs as directors, I can't help but question why they place greater emphasis on initials after an individual's name rather than on the individual. I'm sure they were not privy to the selection process that determined Mr. Marketti—not his professional initials—was the best qualified candidate for that particular director role. Perhaps he would not have been selected in any other setting, but that's not the point.

Here's the point: An individual is more than a set of initials prescribed by a narrow-focused, like-minded elite group of academia. To be certain, academics plays a crucial role in all phases of life as it is the means which justifies the end. Contrarily, it is not the degree that defines the person; rather it is the person that defines the degree by employing practical knowledge and experience with academics.

Do extra initials really make a "better" person? Do teachers really need a master's degree to effectively teach, or just earn a pay raise? Does having an MBA make one qualified to lead a business?

If we ignore others' ideas and suggestions because we mistakenly classify them as "inferior" based on initials, then we are truly ignorant to improvement and undeserving of the initials in the first place.

Some are innately gifted with leadership skills and others are seemingly jealous of these skills, especially when they out-rank the leader. Well, folks, this is not the military! If you want to lead, throw your proverbial hat into the ring and may the best person be selected.

Otherwise, do your best to work with the director, not above or below him, and offer appropriate suggestions and comments to make the system run smoothly.

I'm sure even with his limited academic knowledge, he knows he doesn't have all the answers and would appreciate your input. After all, he's not directing your personal job responsibilities—he is aware of your well-deserved initials—he's directing the department to a successful and profitable outcome, and preventing fights on the playground.

—Curtis Umscheid, PTA
Fort Benton, MT

Can You Hear Me Now?

Opening communication lines can keep your rehab business humming

By Diane McCutcheon

How many times have you heard that the solution to most of our problems is communication? You know—talking, conversing, speaking, exchanging words, being in touch, writing? Probably more than you care to say. Many of us are probably tired of hearing it, even though we know it to be true.

So although we hear it and in fact believe it, why do we still have trouble communicating? The simple answer is that many times, we don't know how to effectively communicate in a way that gets attention or results. And insufficient communication, more than anything else, can affect your rehabilitation business success the most.

To become a better communicator, you have to identify your communication problem and look at some of the outcomes you've experienced as a result of your behavior.

The Problems

There are many ways to communicate. Many of us are great at some of them—but not all. Unfortunately it's the ones we're not good at that usually get us into some kind of quandary. Let's take a look at some methods of communication that can cause problems when running a health care business, and some strategies you can use to overcome or circumvent them. Do any of these apply to you?

Confrontation. A situation has come up in which you have to speak with your partner, manager, employee or other associate. But once again, you just can't find the time.

It's just not a good day, or perhaps you're thinking, are things really on a slippery slope, and if I don't address it, will things really get worse? Will it hurt the company?

On the other hand, you might think that if you do address the problem head on, your employee may "blow up," quit, or somehow sabotage the working environment for other employees? What do you do?

Overbearing supervision. You need to ask a question about accounts receivable to your biller/collector. But instead of asking, you tell her what the problem is, "let loose" as to what she'd better do to make it right, and then leave. It seems you handle many problems this way, and get more frustrated when things don't change, yet you fail to realize they don't know how to solve the problem. Your employees are used to your outbursts, and are unlikely to hear what you say.

Command-and-control. You put people in place to do a job, make it clear what your expectations are, and then hover over them, controlling their every move. Whenever you can run to someone to let them know something wasn't done perfectly, you do. You don't wait for an answer or give them time to explain why; you just want to be sure it doesn't happen again. You take a myopic view of your business, rather than a broad view.

TOM WHALEN

While little things can add up to big things, there are times when you have to let them play out, and give employees the opportunity to finish their job and correct their own errors. You can use the opportunity to discuss new strategies for avoiding errors at meetings—get their input.

Silence or ignoring the issue. Things aren't going well and you know it, but you continue to drop hints, hoping someone will catch on. But the last thing you're going to do is speak out loud about it. Maybe if you ignore it and say nothing, it will go away.

Not likely. If employees recognize your weakness, they'll tell you what you want to hear, knowing you won't go any further. This goes hand-in-hand with the confrontation problem. Serious problems can arise, even fraud and embezzlement. A particular phrase I often hear is "I had no idea."

Procrastination. Do these answers sound familiar? "Let's handle that tomorrow." "I have to think about it a bit more." "That's on my list for today and I'll get back to you." "I didn't know it was due today—why didn't you tell me?" "I thought you were going to handle that." And finally, the meeting in which you say, "We can't continue to miss deadlines."

Procrastination holds back your ability to be ahead of the game, to move before anyone else. By the time you "get to it later," many have already "been there and done that." You're behind the curve.

E-mailing and written communication. Do you sometimes read e-mail or other written communication and react immediately with written words that, after you've calmed down and digested the situation, you then realize were inappropriate?

What you should do is put the correspondence away until your emotions are in check and you can take another look at it later in a different frame of mind. You want to act with a clear mind, make sound decisions, and control the situation. You may even decide that a phone call is a better way to handle it.

The Solutions

Can you find yourself in any of the above communication situations? If you can, you may now see how your communication style may have affected or been the cause of unpleasant outcomes in your practice. Your reactions and tone, verbal or written, can bring you down, upset operations and cause you to lose staff and control of your business. In the long run, it costs you money.

To become a better communicator, you have to identify your communication problem and look at some of the outcomes you've experienced as a result of your behavior. If you have trouble identifying your problem, ask someone close to you who will tell it like it is. Here are some things to consider.

Set a meeting location and set ground rules for yourself and others. Where you meet with a person or a group is vital to obtaining successful results. Pick a date and time when you have nothing else planned. Be prepared for the worst, and hope for the best.

Based on what you'll be addressing, don't go beyond a reasonable length of time, and don't complain—you are the leader. Your meeting could last from 5 minutes to an hour or more, but that's your call—the time you set is for making decisions on the problems at hand. Be on time and make sure there are no interruptions, phones, or texts by anyone, including you. Decisions must be made in the best interests of the company—not you.

Be a leader and confront people straight on. Ask direct questions—don't beat around the bush or try to ask in a way you hope they'll understand. Don't insinuate anything other than you know there's a problem, and this meeting is to address it.

Once you pose the question, ask whether they clearly understand your point. If you are teleconferencing or writing an e-mail, which I don't recommend, do the same. Be sure your questions are direct and ask the respondent to let you know whether they're clear about what you're asking.

Don't be accusatory. It may be that you have something to do with the situation that you're unaware of. Eliminate the accusatory tone. Often, when someone receives a written or verbal warning, all it gets you is retribution one way or another. It doesn't solve the problems at hand.

Remember: it's not what you say, it's how you say it. Present the problem and the way things are currently being handled so that others will understand. Convey what has to happen in order to reach the goal, no matter how big or small. Make it understood that you'll be there to help.

Listen. Get all the preconceived notions that you already know the answer to out of your head. Listen to what's being said and keep the discussion focused. Don't get distracted with other stories that will take away from the real reason you're there.

Many people will be defensive. That's fine, but it doesn't solve the problem. Listen to rebuttals, and be prepared to take responsibility for your being part of the problem. However, don't give in and accept it all. Hold others accountable for their actions.

In this "I'm so busy" world, do yourself a favor. Remember that it's your business, and you are ultimately responsible for bottom line decisions. Stop, listen, assess and decide. The longer you wait to confront your staff, hold others accountable, and make timely decisions, the more time there is for others who are also "busy" to move ahead of you. ■

Diane McCutcheon is president of DM Business Management Consulting Services, a rehabilitation management consulting company in Hopedale, MA. She can be reached at www.dmbmcsi.com

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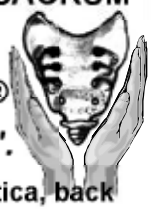

Small Bodies, Big Problems

Preventing traumatic and overuse injuries in young athletes is a mounting concern

By Tamara C. Valovich McLeod, PhD, ATC, FNATA

There are more than 30 million children and adolescents participating in organized sports in the United States.[1,2] These athletes take part in school-based athletics, summer camps, club leagues, and sports enhancement programs.[3,4]

The good news is that sports can be a useful tool to help children and adolescents develop physically, mentally and socially.[5]

Physical activity, including school and club-based athletics, benefit children and adolescents in several ways. Participation in sports can educate and teach valuable lessons for practical situations, including teamwork, sportsmanship, and hard work. Furthermore, sports participation can foster success in later life, as participation is often a predictor of later success.[6]

However, there are risks to participating in sports—particularly sport-related injury. More than 3 million injuries occur annually in children and adolescents that cause time lost from organized sport.[1] Of these sport-related injuries, more than 750,000 require a visit to a physician, and 45,000-90,000 require hospitalization.

Sports account for more than 35 percent of all medical visits in 5-17 year olds, and more than 20 percent of all emergency department visits in 5-24 year olds.

It is estimated that 20 percent of participants sustain a sport-related injury, and while most (80 percent) are considered minor, 20 to 25 percent of acute injuries are deemed serious.[7]

Sports account for more than 35 percent of all medical visits in 5-17 year olds, and more than 20 percent of all emergency department visits in 5-24 year olds.

Many of these injuries require medical attention, adding significantly to the annual amount of money spent on health care costs. Additionally, an estimated 12 million student athletes between the ages of 5 and 22 suffer a sports-related injury annually, which leads to 20 million lost days of school.[8]

The Downside of Youth Sports

Sport-related injuries in the pediatric population represent a significant health care concern. Some reports and clinical observations indicate that 50 percent of pediatric patients present to sports medicine clinics for chronic injuries.[9,10]

Repetitive stress can result in these chronic or overuse injuries. Sports injuries can result in lost participation time, numerous physician visits and lengthy, often recurring rehabilitation.[11-13]

Furthermore, athletes who sustain recurrent overuse injuries may stop participating in sports and recreational activities, potentially

KYLE KIELINSKI

The NATA Position Statement on Pediatric Overuse Injuries

Injury surveillance—NATA urges parents, coaches, athletic trainers and others in charge of the welfare of young athletes to be vigilant in the surveillance and reporting of all injuries. In addition, pain, fatigue and decreased performance should be recognized as early warning signs of potential overuse injuries.

Pre-participation physical exams (PPEs)—Student athletes are urged to undergo a physical examination prior to beginning a new sport (or prior to the start of a new sports season) in order to screen for potential risk factors, including injury history, stature, maturity, joint stability, strength and flexibility.

Identification of physical risk factors—Health care professionals, parents and coaches should also learn to recognize the anatomical factors that may predispose an athlete to overuse injuries, including bowed legs, knock knees, pelvic rotation and joints that that easily move beyond their normally expected range (i.e., hypermobility).

Sport alterations—Emerging evidence indicates that the sheer volume of sports activity, whether measured as number of throwing repetitions or the amount of time participating, is the most consistent predictor of overuse injury. Efforts should be made to limit the total amount of repetitive sports activity engaged in by pediatric athletes so as to prevent/reduce overuse injuries. Alterations to the existing rules for adult sports may help prevent overuse injuries in younger athletes and should be considered by coaches and administrators for sports where specific youth rules are lacking.

Training and conditioning programs—NATA's position statement advocates incorporating a pre-season or in-season preventive program that focuses on neuromuscular control, balance, coordination, flexibility and strengthening to reduce the risk of overuse injuries, especially among pediatric athletes with a previous history of injury. In addition, young athletes should only participate in one team of the same sport per season. Training intensity, load, time and distance should only increase by 10 percent each week, in order to allow the child's body to adapt and avoid overloading muscles and joints.

Delayed sports specialization—Youth athletes are encouraged to participate in multiple sports and recreational activities throughout the year, to enhance general fitness and aid in motor development. They should also take time off between sports seasons and take two to three non-consecutive months away from a specific sport, if they participate in a single sport year-round. ■

adding to the already increasing number of sedentary individuals and the obesity epidemic.

Repetitive stress on the musculoskeletal system without adequate and appropriate preparation and rest can result in chronic or overuse injuries in athletes of any age. In children and adolescents, this fact is complicated by the growth process, which can result in a unique set of injuries among pediatric athletes.

Overuse injuries can include growth-related disorders and those resulting from repeated microtrauma.[14] Growth-related disorders include Osgood-Schlatter's disease, Sever's disease, and other apophyseal injuries.

Growth-center injuries may have long-term physical consequences and affect normal growth and development.[15,16]

Besides the obvious deficits in physical functioning and an increase in reported pain, it has been found that recent musculoskeletal injury results in lower health-related quality of life (HRQOL) in the areas of social functioning and global HRQOL, indicating injuries affect areas outside the expected physical component of health.[17]

This is a significant concern for considering the current quality of life of pediatric athletes as well as the future impact that injury may have on longer-term health outcomes. There is the potential that injuries sustained as the result of sport participation may lead to dropout from physical activity and the myriad negative long-term health consequences associated with inactivity.

Also, poorly managed musculoskeletal injuries sustained during adolescence may lead to significant and disabling long-term health problems, such as osteoarthritis.

Finally, negative health-related consequences associated with sport-related injury may have other, as yet unknown, negative health consequences that may impact areas of the patient's life outside of sport, such as their study habits, personal relationships, and risk for substance abuse.

Recommendations for Prevention

While there is little research identifying factors that result in overuse injuries in children and adolescents, it has been proposed that these injuries may be caused by training errors, improper technique, excessive sports training, inadequate rest, muscle weakness and imbalances and early specialization.

Therefore, the prevention of pediatric overuse injuries requires a comprehensive, multidimensional approach.

This preventive approach has been advocated by several prominent sports and health care organizations, including the National Athletic Trainers' Association (NATA).[18] The NATA Position Statement on Pediatric Overuse Injuries recommends six steps for making school athletics safer, by reducing repetitive-stress injuries in children age 6 to 18.

Participation in youth sports should be encouraged, as there are many physical, psychological and social benefits. However, injuries may occur and should be treated by an appropriate medical professional before the child returns to activity. Parents and coaches should be encouraged to understand potential risk factors for overuse injuries and implement mechanisms to prevent these injuries. ■

References are available at www.advanceweb.com/pt under the Resources tab.

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SOLID FOOTING

Gait analysis can help therapists recommend proper shoe fit for injured athletes

By Bruce R. Wilk, PT, OCS, and Anthony R. DiMercurio

Following a running-related injury (RRI), patients often seek guidance on proper shoe selection. It is vital for sports rehabilitation clinicians to be able to identify and evaluate patient need, offer recommendations, and isolate defective or worn out shoes.

A safe and proper return to participation begins with an appropriate pair of running shoes and a sound training program. Choosing a shoe free from defects and based on individual gait analysis has afforded injured patients a faster return to safe running.[1]

Gait Analysis in Shoe Selection

When purchasing the ideal running shoe, patients should begin by consulting with a specialty running shoe store. Most specialty running shoe stores routinely use video gait analysis on a treadmill, to provide baseline information about an individual's specific needs before recommending any running shoes. Video gait analysis is an effective way to observe and analyze individual biomechanics, as an evaluation of full gait is required to adequately analyze the patient's foot and gait pattern.[2]

Minimalist shoes and racing flats should be used for the initial video gait analysis so the shoe doesn't affect gait mechanics, such as pronation.[2,3] It is not safe for patients to run barefoot on a treadmill; thus, barefoot running should never be used for any video gait analysis. Before taking the patient on the treadmill, make sure all metatarsals of the foot are sitting evenly on the shoe platform, taking notice of the width of foot. Any portion of the foot sagging over the edges is a signal of an improper fit and can lead to an inaccurate analysis, as well as discomfort.

During video gait analysis, look for non-neutral gait patterns, and listen to the sound of the foot strike. Once videotaped, analyze the gait pattern in both slow motion and at full speed to precisely evaluate any signs of overpronation or supination. Evidence of overpronation or supination, proven by video gait analysis, can help the patient select a shoe that works for their gait pattern. With a significant amount of overpronation, the patient will benefit from a more stable, supportive shoe, classified in the stability category. Limiting the amount of movement in the rearfoot allows the patient to have maximum support upon foot strike.

A study presenting rearfoot motion with neutral shoes versus stability/motion control shoes proved that a runner in a neutral shoe had a 6.5-degree movement while the stability/motion control was significantly less.[4] These shoes come equipped with medial posting and firmer materials built into the shoe to help prevent the overpronation during foot strikes. A patient who supinates will

KYLE KIELINSKI

Elite high school and collegiate athletes travel to Philadelphia every April for the Penn Relays, the oldest and largest track and field competition in the United States. With technological advances such as video gait analysis, sports rehab clinicians are better equipped to make training and equipment decisions to keep these high-level athletes healthy and injury free.

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benefit from a less-stable, more cushioned shoe, providing more impact-resistant materials such as gel and air.

The salesperson at a specialty running shoe store should know how to properly analyze gait and must also be knowledgeable about a variety of different shoes in a variety of brands. The salesperson should attempt to fit as many shoes as possible, keeping within the category recommended for the patient. Once a few shoes have been narrowed down, the patient should try on the different shoes and focus on the comfort and fit of the shoe.

Specifically, the fitter should observe how the shoe moves when striking the ground, how the rubber compresses on the foot, and the patient's overall subjective comfort level. With the new shoe, have the patient run on the treadmill, and analyze gait mechanics during initial contact, midstance and push-off.

Check whether the shoe is digging or rubbing on any portion of the foot. A patient running with too much support will present a clucking sound upon foot strike, whereas a patient running with too little support will present a slapping sound upon foot strike. Most importantly, ask the patient if the shoe feels like it's a part of the foot. A well-fit shoe will feel like a continuation of the foot.

Runners, historically, have used more supportive shoes early in training and progressed to lighter weight and less platform later in training. This traditional concept of running may work for seasoned athletes, but for injury management, always go with more shoe, as more support is necessary for safe, initial return to participation.

Upon return to participation, the patient's

feet are reintroduced to body weight load. Sudden body load increase can stress healing muscles and bones. Load stress brought on by overpronation is increased up to 200 percent; thus, the control of initial pronation (support shoes) is much more important in running shoe design than cushioned shock absorption.[5] Therefore, if a patient is nursing an injury, more load support will likely increase safe injury management.

Detecting Defective Running Shoes

Avoiding defective running shoes is critical to preventing further injury. An athletic shoe should be constructed so that its upper, midsole and outer sole is firmly attached. Inflexible shoes can cause calf muscles to overwork and can contribute to the development of specific injuries.[6]

Before recommending a shoe, check its construction. The shoe should continuously be glued together correctly at all locations. The upper (mesh portion) should be glued straight into the sole. The sole of the shoe should be level to the surface it is resting on.[7] Check for asymmetry from side to side on each shoe. If the shoe can be rocked, then it may not adequately support the foot from rolling excessively when worn.

When using a shoe with air pockets or gel pockets, check to see whether those materials are still inflated. Sometimes, the support technologies within the shoe tend to deflate, thus leaving the shoe purposeless. A shoe should have flexibility, with the flex occurring specifically at the metatarsal heads, the widest portion of the shoe (toe box).[8]

Furthermore, when choosing a running specialty store, be sure that the shoe selection is always current. An older model shoe that's been discounted may not be the best choice because some materials within the shoe, such as gels and rubbers, do have a limited shelf life.

A safe return to running activities should initially begin with some fitness walking with full heel-to-toe motion, and progress to gliding, which is flat-foot initial contact for long,

KYLE KIELINSKI

slow distance. The shoe should allow an individual to move through a full gait heel-to-toe motion. A forefoot gait pattern is practiced and refined later with accelerations during training and plyometric exercises.

Physical therapists, athletic trainers and associated rehab personnel should consider the kind of injury, extent of the injury, and training level of each individual before recommending a return to a training program. Refining performance should focus on biomechanical energy efficiency.

This applies to a precisely fitted shoe. Foot strike energy should be returned at the right location at the right time and a reduction of energy is more important than return of energy.[9]

Reducing the amount of energy upon foot strike for a patient returning to participation thus allows the patient to safely return to activity progressively through the correct fitness regime.

Presenting ample knowledge on shoe recommendations can greatly improve the outcomes of injury management regimes. Provided with accurate information, a patient suffering from a RRI can safely and successfully return to running. ■

References

1. Gabor, J. (2006). *Computational intelligence for movement sciences: Neural networks and other emerging techniques.* Ed. Rezaul Begg. Hershey, PA: Idea Group Publishing.
2. Whittle, M. (2002). *Gait analysis: An introduction.* Third edition.
3. Wilk, B. (2007). The Nike Free as a useful tool for video gait analysis. http://www.thefreelibrary.com/The+Nike+Free+as+a+useful+tool+for+video-gait+analysis-a0171020562
4. Cheung, T., Roy, H., Ng, Y., et al. (2006). Efficacy of motion control shoes for reducing excessive rearfoot motion in fatigued runners.
5. Murphy, V. (2004). The efficacy of subplantar cushioning in modulating ground reaction force and total impulse in normal walking gait. http://www.medicalengineer.co.uk/pages/rehabilitation-engineering/gait-analysis.html
6. Denoth, J., & Stacoff, A. (1988). Running injuries and running shoe construction: Demonstration of possible correlations. http://www.ncbi.nlm.nih.gov/pubmed/3242154.
7. Wilk, B. (2000). Defective running shoes as a contributing factor in plantar fasciitis in a triathlete. http://www.ncbi.nlm.nih.gov/pubmed/10705593.
8. Pribut, S. (2009). Selecting and fitting a running shoe. http://drpribut.com/sports/spshoe_fit.html
9. Segesser, B., & Nigg, B. (1993). Orthopedic and biomechanical concepts of sports shoe construction. http://www.ncbi.nlm.nih.gov/pubmed/7908458.

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Expanding the Tool Kit

Fueled by big-time exposure at the Beijing Olympics, kinesiology taping continues to gain momentum as a valuable adjunct to traditional physical therapy

By Greg Thompson

When Steven Huber, PT, CKTI, heard his 5-year-old patient declare that she "hated her arm," the physical therapy veteran knew he had a challenge on his hands. Born with a brachial-plexus injury—also known as Erb's Palsy—the young girl had already received physical and occupational therapy from birth to 2 years.

As she grew, she began to use her arm incorrectly, developing tightness and abnormal movement. After three weeks and five visits with Huber, she is playing T-ball, raising her hand in class and using the arm to eat with.

"We used kinesiology taping on the very first day, and we were able to get her arm to straighten to about 85 percent of normal," said Huber, owner of Huber Associates, a private physical therapy practice in Auburn, ME.

At the Cleveland Clinic Children's Hospital, Trish Martin, PT, CKTI, confirmed that kinesiology taping has also helped her Erb's Palsy/brachial plexus patients. As a one-time skeptic, she now believes kinesiology taping has massive potential for all kinds of ailments. "The first time I tried it on an injury, I honestly did not believe it could take away swelling or bruising," confessed Martin, who serves as a therapy services satellite manager. "However, kinesiology taping decreased the circumference of my patient's thigh by about 4 inches within two days. It was ridiculous. I now use it for acute and chronic injuries with incredible results."

Variety of Conditions

As a certified kinesiology taping instructor (CKTI) for the past nine years, Huber has also seen his share of amazing outcomes. His only regret is that he did not have the treatment in his back pocket when he saw a particular sciatica patient a dozen years ago. Huber treated the man in 1999 with mixed results.

Two years ago, the man came back after reading about Huber's work with the "funny" tape. He still had sciatica, but this time Huber taped the sciatica path. "We did this once a week for about 6 weeks," said Huber, who is also an orthotist. "Since then, he has had no sciatica. I wish I had this 12 years earlier when I first saw this man."

Within the pediatric population, Martin most often uses kinesiology taping on children with low tone, torticollis, cerebral

JEFFREY LEESER

palsy and obstetrical brachial plexus injuries. Within these disorders, muscle imbalances tend to be greater and therapy timeframes can extend to years. "I once treated a young boy with low tone, taping his abdominals and back, including his lower and middle trapezius muscles and scapulae for stability," said Martin. "With the tape, he was able to sit up for longer and attempt play. He wore the tape for about six months and was much more functional."

Martin usually sees pediatric patients once a week, with children wearing the tape for about six days. The night before the next appointment, parents can take the tape off, allowing the skin to breathe while applying moisturizing lotion.

Patients are re-taped the next day. "You must be careful with the pediatric population," cautioned Martin. "When we do these applications, we don't put a lot of tension on the tape because their skin is more fragile. Some kids will only wear for three days and off for two days. We instruct parents and caregivers how to apply in these situations."

Correct Course

Used in conjunction with strengthening and stretching, Huber is convinced that the correct application of kinesiology taping can foster healing and pain relief in patients of all ages. "Kinesiology taping is not a sole treatment and it is not the only answer," said Huber. "I use kinesiology taping probably with 80 percent of my caseload in conjunction with other things. You need a strengthening program, modalities and myofascial techniques. Kinesiology taping enhances what you do and carries on the effects of what you are doing between treatments—all while promoting healing."

What's Happening?

With a heat-activated backing of medical grade adhesive, the underside of kinesiology tape resembles the shape of a fingerprint, and Huber said it is this fingerprint that replicates the inner digitation of nerve endings throughout the surface of the skin. "The tape lifts the tissue where there is adhesive and it is stuck to the skin," explained Huber. "The tissue is not lifted as much in the non-adhesive areas. You are causing micro-convolutions in the epidermis that transmit down through the lift, creating space under the tape. This opens the end tubercle/lymphatic system to increase fluid flow, while decompressing nociceptors/pain receivers."

Application and direction dictate therapeutic effect. Whether it's from muscle origin to insertion or the opposite, the lifting and recoil influence the muscle. This influence continues after the tape is peeled off, a phenomenon that is news to most learners in Huber's seminars. "The biggest misconception about tape is that it only works when it is on," he said. "You are trying to change the underlying tissue for long-term effect. The object is to use tape as a tool with the end goal of not using it. That's similar to physical therapy, where we attempt to correct the problem and ultimately stop physical therapy."

Yet another misconception is that kinesiology tape serves the same function as rigid tape. Martin dispels the misunderstanding in her seminars at the Cleveland Clinic, where she welcomes skeptics. "People need to be a bit more open to the possibilities," said Martin. "I invite skeptics, because they are not likely to make the tape into a hammer while everything becomes a nail. I was using it initially as a splint or support, because I did not buy into the other

effects. Now I tell students that kinesiology taping can and should be used for swelling and fascial release."

Based on the premise that the body "wants to be in balance," Huber contends the tape gives the central nervous system information to process. "Our body learns through consistency of input and repetition," he explained. "What better way than to put something externally on the skin to give a constant sensory input over a three- to five-day period to help a muscle relearn what it is supposed to do?"

Celebrity Sightings Fuel Growth

The 2008 Beijing Olympics attracted many corporate logos, but the gold-medal beach volleyball performance of Kerri Walsh and Misty May-Treanor had people talking. The colorful kinesiology tape atop Walsh's 6-ft, 3-inch frame, in stark contrast to her white two-piece bathing suit, simply could not be missed.

Internet message boards espoused comical theories about possible political statements, obscure sponsors' logos hidden in the taping patterns or even tattoo cover-ups. According to published reports, Walsh's therapists used the tape to stabilize a surgically repaired shoulder and encourage blood circulation.

Huber estimated that more than 200 athletes sported tape during the Olympics, and use among the general public has only climbed in the intervening years. For Martin's young patients, a certain "cool factor" has even replaced the stigma of wearing the tape.

"You get to wear the same tape that athletes are wearing," enthused Martin. "Prior to the Olympics, a lot of athletes wore the tape but it was beige or covered by uniforms."

"We ran out of product after Kerri Walsh appeared at the Beijing Olympics," confirmed Huber with a chuckle. "The tape was extremely visible because she—and her opponents who were also wearing the tape—all had such little clothing on. Many times, athletes cover the tape to avoid the area becoming a target. Until this year, kinesiology tape was not apparent in basketball because it was thought to detract from the uniform code, but now they are wearing it."

After a decade of teaching and treating, Martin and Huber have seen the anecdotal evidence pile up regarding the therapeutic effectiveness of kinesiology taping. However, both acknowledged that in today's evidence-based environment, more research is needed to fully validate its beneficial impact.

They welcome formal studies and are confident that kinesiology taping will perform well. "I have been working with patients who have Lou Gehrig's disease on issues such as head control and respiratory problems," said Huber. "Topics are limitless at this point, and as we learn more I am confident the applications will only expand." ■

Greg Thompson is a freelance writer in Fort Collins, CO.

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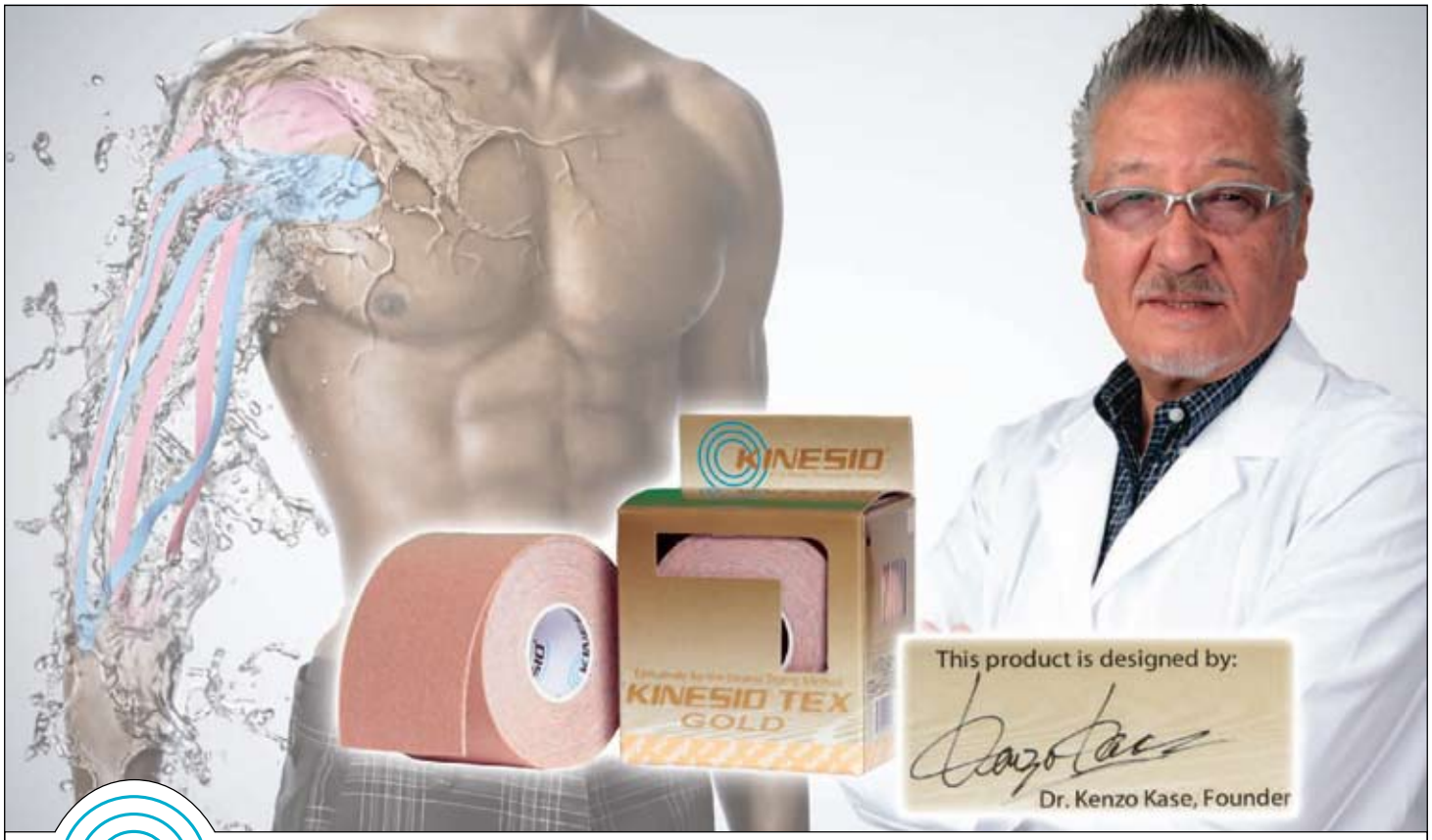

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When Things 'Collapse'

Understanding ACL injury in female athletes

By Ben Wiggin, MPT

Over the past 20 years, there has been a steady increase of female participation in sports at both the high school and collegiate levels. This growth in participation has proven to be a valuable outlet for which females can develop, practice and demonstrate athletic abilities.

Compared to their male counterparts, however, female athletes have been statistically more prone to a certain type of injury. This injury is a particularly daunting hurdle that has the potential of blocking further athletic performance.

This hurdle, in the form of an ACL (anterior cruciate ligament) tear, can take six to eight months to recover from before the athlete is back on track. Unfortunately, it is a hurdle that appears to be disproportionately high in female athletic populations.

As early as the mid 1980s to the early 1990s, statistics have shown a gender-biased knee injury rate with females vs. males. These injury rates, documented by the NCAA, NATA and various independent studies, show a much higher injury rate at the knee in females compared to males competing in comparable sports.

One would think that injury to the ACL would necessitate some sort of traumatic contact with another athlete, such as in football or soccer. While contact ACL injuries are prevalent, many of these injuries occur in sports such as volleyball, basketball and gymnastics, which are typically thought of as no/low contact sports. This initially led many researchers, physicians and physical therapists to focus their attention on other factors that could be a contributing factor to non-contact ACL injuries.[1]

Knowing the Causes

Potential explanations for the cause of this higher injury rate were many and varied. Initially, attention was focused on female-specific biology. It was proposed that hormonal factors and fluctuating levels of estrogen before ovulation could affect ligament laxity and thus affect injury rate. Oral contraceptives were also studied to investigate their effects on ligament laxity and injury rates. It was suggested that such contraceptives could decrease ligament laxity and thereby decrease injury rate.[2]

Lower-extremity morphology or the shape, appearance or alignment of bone structures has continued to be an area of focus with female knee injuries. Theories have been proposed in which the width of a bony crevice at the lower end of the thigh bone (femoral intercondylar notch) can affect ligament stability and injury rate. The Q-angle, or the angle of the thigh muscle (quadriceps) pulling on the kneecap and lower leg bone, has also been researched.

Other researchers have focused extensively on discrepancies in strength or muscle imbalances in female athletes. Most studies focused on the strength of the two large muscle groups crossing the knee joint—the hamstrings and quadriceps.

The strength of these groups was compared in a ratio appropriately called the H/Q (hamstring/quadriceps) ratio. The premise of the investigations is that if one of these muscle groups were weaker than the other, the H/Q ratio would be affected. This would in turn affect the dynamic stability of the knee and make the knee more vulnerable to injury.

While the range of injury risks included hormones, contraceptives, female alignment/bone structure, muscle imbalances and joint/ligament laxity, they all had one thing in common. All of these studies focused on the effects of all these variables on one plane of motion—the sagittal plane.

This anterior-to-posterior (front-to-back) plane of motion was studied almost exclusively due to the ACL's proposed biomechanical role at resisting shear force at the knee. While most all the studied injury risks had the real potential to contribute to knee injury,

KYLE KIELINSKI

there was an underlying premise that ACL injuries occurred in only the sagittal plane of motion.

Studying the Biomechanics

Those working with athletes who sustained non-contact ACL injuries recognized that the mechanism of injury rarely occurred in exclusively the sagittal plane of motion. The review of a patient's history and mechanism of injury often were more complex than that of an injury sustained in purely a sagittal plane.

Forces imposed upon the knee during non-contact injury typically involved multiple planes of motion. Studies soon began to look outside the somewhat tunnel vision of sagittal plane injury and began to investigate "multiplanar" involvement.

Studies emerged producing strong evidence that non-contact ACL injuries likely occur as a result of excess motion in the sagittal, frontal and/or transverse planes of motion.[3] Injury to the ACL began to be looked upon in a much more dynamic, multidirectional fashion.

Video analysis of athletes who sustained an ACL injury proved to be a valuable biomechanical tool for the study of ACL injury. Review of these videos produced a common theme for those unfortunate athletes who sustained injury.

A majority of the athletes were prone to having their legs fall into a particularly vulnerable position, which has since acquired the phrase "dynamic valgus collapse" (DVC). This valgus collapse involves the movement of the leg/knee in multiple planes of motion.

The thigh bone (femur) falls and rotates in toward the opposite leg (adduction and internal rotation). The lower leg bones (tibia and fibula) rotate out (external rotation). All of this happens simultaneously while the knee bends and falls in (flexion with valgus force).

Think of the knee going into a knock-knee position (falling in) while the thigh bone rotates in and the lower leg bones rotate out. The result is an opposing twisting force meeting a collapsing-type force at the knee.

Video review of individuals who sustained an ACL injury during competitive sporting events has shown a gender-biased injury risk toward females. During basketball events, researchers found females to be more than five times more prone than males to dynamic valgus collapse.[4]

This valgus collapse was seen during cutting maneuvers, deceleration maneuvers, initial contact from jumping, semi-squat positions and push-off type motions in lateral maneuvers. Later studies confirmed this phenomenon of females having greater valgus collapse.[5]

Addressing Therapy

How should physical therapists address this phenomenon of DVC? Since the mechanism of injury essentially involves a fault with movement, interventions typically involve neuromuscular re-education/control to correct the faulty movement pattern.

Depending on the patient/athlete at hand and the data obtained from your evaluation, there may be multiple causes for this

neuromuscular deficiency.

Some patients may have a balance deficit in conjunction with poor core strength. They may in turn require a plan of care and home program tailored toward balance training, dynamic stabilization and perturbation exercises, as well as core/lumbar stabilization. Others may present with functional strength impairments or poor jumping technique. These patients may benefit from plyometric training and jump retraining/kinesthesia exercises.

The cause of the functional strength deficit needs to be addressed and may include proximal musculature such as the gluteus medius. This can help control eccentric hip adduction and internal rotation, both of which are components of dynamic valgus collapse. Training the quadriceps and hamstrings to co-contract with the more proximal hip musculature is also of vital importance.[6]

As with any plan of care, function should be a driving force, and exercises should be as sport-specific as possible. This may require varying degrees of agility training and/or endurance training, depending on the physical and metabolic demands of the sport at hand.

If a patient presents in your clinic with movement patterns similar to that noted with DVC, you may have the potential to prevent an unfortunate injury in the form of an ACL tear. If a patient has already had an ACL tear, retraining this impairment will do wonders for preventing further re-injury. This could in turn save a patient from a six- to eight-month hurdle blocking athletic participation. ■

References

1. Bernier, M. (2010). *Injuries in Youth Sports*. Instructional course lecture by MEDS PDN, p. 43-48.
2. Martineau, P. (2004). *Clinical Journal of Sport Medicine*, Vol. 14, 281-286.
3. Quatman, C., & Hewett, T. (2009). The ACL injury controversy: Is "valgus collapse" a sex-specific mechanism? *British Journal of Sports Medicine*, 43(5), 328-335.
4. Hewett, E., Bahr, R., et al. (2007). Mechanisms of anterior cruciate ligament injury in basketball: Video analysis. *American Journal of Sports Medicine*, 35, 359.
5. Barry, P., Boden, J., Torg, S., Knowles, S., & Hewett, T. (2009). Video analysis of anterior cruciate ligament injury. *American Journal of Sports Medicine*, 37, 252.
6. Van Ingen Schenau, G., Bobbert, M., & Rozendal, R. (1987). The unique action of bi-articular muscles in complex movements. *Journal of Anatomy*, 155, 1-5.

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Inner Strength

Pilates for sports injury rehabilitation can keep athletes ahead of the curve

By Wayne Seeto, BOccThy, MSc(PT)

Participation in Pilates has grown exponentially around the world over the past five years. Experts say Pilates is effective in injury rehabilitation settings as it can provide athletes with a challenging workout without impact or excessive weight bearing.

Traditional athletic training methods will help develop the muscles required in a specific sport, but may not address the stabilizing muscles around the joints or the torso. Often, one muscle is identified, and exercises are designed to isolate that muscle, usually in a single plane of motion.

A strong core provides a dynamic link between the upper and lower body, alleviating excess stress on the peripheral joints.

However, Pilates exercises can be more complex than traditional moves and will therefore recruit more efficient neuromuscular firing patterns. These patterns will in turn strengthen muscles from many angles and in a variety of different ranges of motion.

Pilates Primer

Pilates is ideal for anyone wanting to expand their exercise regimens to include stabilizing and strengthening moves that also work the musculoskeletal and fascial systems. Pilates is functional and works all levels of muscles and therefore fascial systems—a perfect complement to anyone's sport conditioning or strength training.

Unlike other strength training regimens traditionally designed for athletes, Pilates focuses on recruiting the deep stabilizing systems of the body, thereby improving biomechanical efficiency and muscular balance along with increasing proprioceptive awareness.

Active recovery is the period of muscle regeneration after a strenuous phase of competition or activity. Pilates is an excellent training modality during active recovery during pre-competition and post-strenuous activity. It can help during this period by gently working through movement patterns that allow the muscles and joint structures to achieve their ideal functional positions and sport-specific skills.

One of the focuses of the basis of Pilates is ideal alignment of the skeleton to promote optimal movement, core strength, and stability and mobility of the periphery, and this is most easily found in a supported position. Exercise progressions develop from there. Mindful movement and proper diaphragmatic breathing provide kinesthetic awareness and a stable base from which to move. The idea of focusing the mind on what the body is doing can afford profound benefits.

Recovery from Injury

Pilates focuses on rehabilitating in an effective way with low-level skill development and progressive loading through the affected area. Rehabilitative programs will begin with a focus on strengthening the deep supporting structures of the body, and then progress to more complex movements that integrate the injured area into full functional and sport-specific movement patterns.

Throughout the progression, biomechanical compensations are identified and specific corrections or modifications are given to improve the quality of the movement patterns and to strengthen the mind-body connection.

Pilates offers clients a variety of options and movement experiences, which is integral to their motivation, interest and recovery.

"Pilates promotes postural alignment and muscle activation throughout a movement, ensuring there is appropriate stability proximal or distal to the movement," said Carole Chebaro, H.B.Kin, B.Ed, MSc, a physiotherapist and co-founder of Neurocore Physiotherapy Centre in Richmond Hill, Ontario. "It can vary from specific isolated movements to more dynamic ones as necessary for the stage of rehab. Many of my clients have acquired brain injuries, MS, [and] spinal cord injuries, and present with quite variable mobility levels—but adapting exercises to their individual programs has provided these clients with a sense of accomplishment and achievement as they are able to participate in mainstream exercises appropriately."

The biggest concern physical therapists have about implementing Pilates into their practices is that the instructors are not trained, qualified individuals with the knowledge in special conditions and injuries, said Chebaro. Another concern is that the assessment of what the client needs may be lacking in depth without the appropriate educational background and training. "The key is quality education," Chebaro said.

Pilates for Rehabilitation

According to Laureen DuBeau, master instructor trainer for STOTT PILATES®, there are other areas of sport training in which Pilates can be useful. During rehabilitation, Pilates can provide an interim step between non weight-bearing, to open-chain, to explosive movements.

"The focus on mobility, flexibility and strength through a full range of motion can help restore the injured area to a healthy state before sport-specific training begins," said DuBeau. "In rehab, Pilates can be used at all stages from the most acute phase to advanced functional re-education."

These concepts are being embraced by sports trainers. This training progresses from general to specific, and from simple to more complex. The lighter resistance and multi-angular training makes Pilates perfect for athletic development as well as anatomical adaptation focusing on developing muscle memory and patterning, according to DuBeau.

Core strengthening is an integral component of any injury prevention, rehabilitation or sports performance program. A strong core

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provides a dynamic link between the upper and lower body, alleviating excess stress on the peripheral joints.

This in turn leads to enhanced athletic performance by providing a solid foundation from which the upper and lower extremities can generate force for running, throwing, rowing or jumping.

The STOTT PILATES® methodology is based on The Five Basic Principles, which is a way of initiating proper and corrective movements. The principles focus on breathing, pelvic placement, rib cage placement, scapular stabilization and mobilization, and head and cervical spine placement.

This programming promotes both stability of the core and mobility of the joints using eccentric contractions, controlled ballistic movements and low-load mindful movements. All three training theories are used in sport and provide optimal firing muscle patterns. Pilates focuses on active lengthening of muscles and mobility of the joints, rather than traditional prolonged static stretching.

Pilates exercises can be easily incorporated into regular sport-conditioning regimens. For instance, on a light weight day, a recovery workout day, or prior to skill acquisition days, a Pilates workout is a great way to work on neuromuscular coordination and efficient muscle-firing patterns. Another option is to add Pilates exercises to a warm-up for muscle activation.

When all neuromuscular and fascial systems work in a timely and coordinated fashion, athletes can achieve large gains in strength, skill, coordination, and biomechanical efficiency. Pilates focuses on improving stabilization of the lumbo-pelvic region, and therefore improved core stability improvement will carry over to the sporting realm, reducing the risk of injury and improving performance.

Although core training may be a bit of a catchphrase in the fitness industry, the true definition of the term is widely acknowledged in medical and rehabilitation communities as the basis for reconditioning the support musculature of the body, according to Lindsay G. Merrithew, president and CEO of Merrithew Health & Fitness.™

"The attention to the core, proper alignment and efficient movement patterns that Pilates offers through its numerous variations of exercises and modifications, with or without specialized equipment, is a natural carryover for the athlete," said Merrithew. "Our team has developed equipment and accessories that allow this method of exercise to reach a wider audience no matter what their goals or fitness levels." ■

Wayne Seeto is a lead instructor trainer for STOTT PILATES® in Toronto, Canada. He received his bachelor's of occupational therapy degree from the University of Queensland, Australia, and his master's of science (physiotherapy) at McMaster University in Canada.

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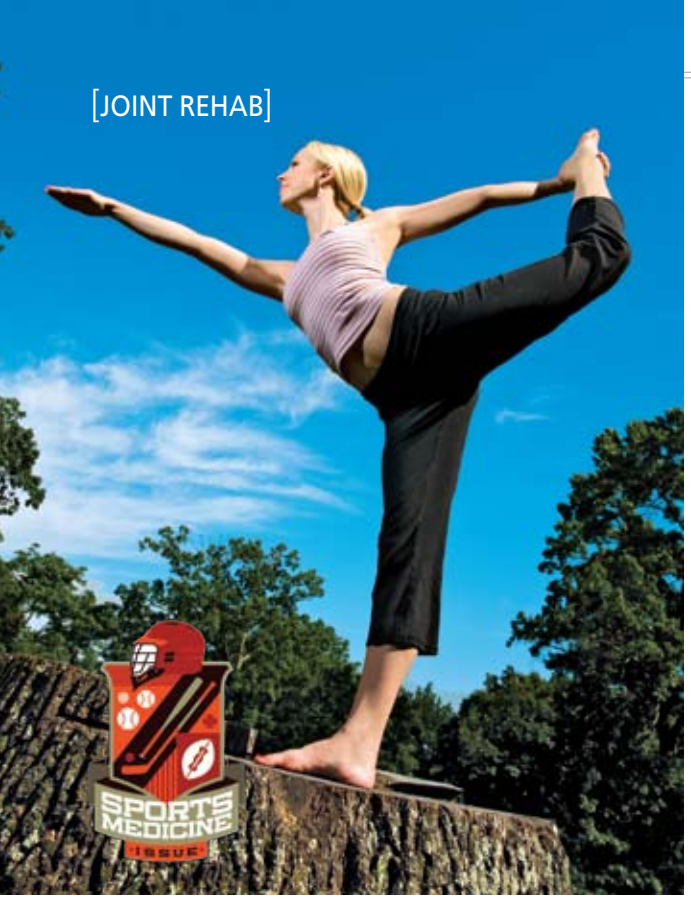

Too Flexible?

Joint hypermobility syndrome in physical therapy patients

By Tracy D. Harper, DPT, ATC

As a young athlete, I couldn't get through a sport season without injury or a painful condition—ankle sprains, shin splints, shoulder impingement, SI pain, brachial plexus strain, and phalangeal fractures to name a few. I thought this was the price you paid if you played hard, until I noticed that teammates rarely got hurt.

Then as a PT student on clinical affiliation, a CI suggested that my injury history and joint laxity sounded like Ehlers-Danlos syndrome. Upon further research I discovered a more likely (and less daunting) diagnosis of joint hypermobility syndrome. Even though no one wants to be diagnosed with a "syndrome," I was relieved to find a potential explanation for my injury history besides clumsiness or bad luck.

Perhaps in orthopedic practice you've treated athletes or non-athletes who are hypermobile in one or more joints. Joint hypermobility—a.k.a. laxity—is defined simply as being able to move a joint beyond its normal physiologic limits when factors such as age and gender are considered.[1] Joint hypermobility syndrome (JHS) may be suspected if hypermobility causes symptoms.

Other names for this condition include familial articular hypermobility syndrome, benign hypermobility syndrome, or simply hypermobility syndrome.[2,6] It is likely that individuals with JHS will be referred to you, though with a diagnosis such as an "-itis", strain, or perhaps fibromyalgia.

Joint hypermobility syndrome is thought to be a type of heritable disorder of connective tissue (HDCT), most of which are characterized by abnormal extensibility of connective tissues as a result of a defect in the collagen makeup. According to Simpson, the defect may be an abnormality of collagen or the ratio of collagen subtypes, and is associated with an autosomal dominant pattern. Other possibly familiar HDCTs include Marfan syndrome, osteogenesis imperfecta, and Ehlers-Danlos syndrome. Some suggest that JHS is identical to the least serious subtype of Ehlers-Danlos Syndrome—Ehlers-Danlos III.[1,3,4] Incidence of JHS is higher in women, possibly due to the effect of hormones.[5]

Although molecular and biochemical analysis can be performed when there is suspicion of a more disabling HDCT such as Marfan Syndrome, JHS as yet has no definitive tests.[2,4] JHS can usually be suspected based on physical examination and patient history, and when other HDCTs, inflammatory ailments, infections, or autoimmune causes are ruled out. Diagnostic criteria for JHS are not well-defined, however, and also lack consistency among research reports.[2] It is perhaps more commonly diagnosed by a rheumatologist.

JHS may involve hypermobility in multiple joints or isolated to only a few.[4,5] Lax joints are generally thought to be less stable, so there may be an increased incidence of sprains, strains, and dislocations, but possibly less tissue damage incurred due to the increased joint laxity.[1-2]

When a joint is hypermobile, everyday use (and misuse) may cause wear and tear of joint surfaces as well as strain/fatigue of surrounding soft tissue.[1] Poor movement patterns may develop, further stressing the tissues. Static postures can also be a source of excessive joint and soft tissue stress.

A painful condition affecting one or more joints may not occur until one is subjected to precipitating factors such as unaccustomed physical activity, change of usual work or sleep posture, pregnancy or sudden weight gain. Pain may also occur only with growth spurts, pre-menstrually, or during adolescence.[5]

Patients may be able to volitionally subluxate, or say they are "double jointed."[7] There may be a familial or personal history of recurrent dislocations or subluxations that reduce easily. Patients may have a long history of various "itis's," or be diagnosed with OA.[3-4] Symptoms may have come on as a child or at any time through adulthood, and may include multiple complaints over a long period.[2]

While hypermobile joints may cause no problems at all, a significant number of hypermobile people are symptomatic.[5] Arthralgia is common, and OA may occur prematurely in early middle age.[5] Pain may be generalized or specific. Patients may have chronic pain or fatigue, and describe feeling unstable, uncoordinated, or stiff. Those with JHS may seem to "fidget" a lot to gain a stable sitting posture.

JHS has been called a multisystem disorder by those who have studied the condition extensively.[1,4] The more commonly recognized characteristics are those affecting the musculoskeletal system. Although there are often no demonstrable signs, some of the more typical characteristics are listed below.[5]

Musculoskeletal system structural/biomechanical abnormalities:

- HAV, flat feet, everted calcaneal position in stance;
- Genu recurvatum;
- Anteverted hip, sway back, spondylolisthesis, scoliosis of T-spine;
- Elbow hyperextension, excessive shoulder ER;
- Excess thumb abduction and wrist extension;
- Symphysis pubis diastasis.

Musculoskeletal system conditions:

- Ankle sprains, OA of 1st MTP joint, plantar fasciitis;
- Medial knee pain, patellofemoral pain, non-contact ACL rupture;
- Trochanteric bursitis;
- Scapular snapping, GH subluxation/

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dislocation;
- Acute wryneck episodes, increased susceptibility to whiplash, headache;
- TMJ clicking;
- OA of thumb MCP, repetitive strain of wrist, medial/lateral epicondylitis.

Due to variations in patient presentation, recognizing JHS may be challenging. As a result, individuals with complaints that are often diffuse, chronic, and inconsistent with any pathology found via diagnostic testing may be falsely accused of being a hypochondriac or malingerer.[2]

The most frequently cited screening tool for JHS is the Brighton criteria.[4-5,7] This tool must include a determination of the Beighton Score, derived through a physical assessment of five simple maneuvers:[3-5,7]

1. Thumb passively opposed to volar aspect of forearm;
2. Fifth finger passively extended to ≥ 90;
3. Elbow hyperextension ≥ 10
4. Knee hyperextension ≥ 10
5. Place hands flat on floor without flexing knees.

One point is given for each of the above completed maneuvers, scoring each limb separately for the first 4 maneuvers (9 possible points).

Although there are no published studies reporting the efficacy of physical therapy in managing JHS, many experts recommend PT along with other interventions.[2] You may be the first to propose this syndrome based on the examination as well as the patient history.

Given their expertise at assessing passive physiologic and accessory joint mobility, therapists are uniquely qualified to raise suspicion regarding excessive joint laxity. Since the referring physician may not be acutely aware of JHS in your shared patient, it is prudent to discuss with them your suspicions before educating the patient.

Education should emphasize self-management strategies, such as exercise and activity modification, and should allay fear of a disabling condition and chronic pain. Referring to websites such as www.hypermobility.org and www.arc.org.uk for further information may also be helpful. Advice should include:
- Avoid overtraining in athletics, as well as overdoing ADLs that typically cause pain;
- Relative rest for acute pain;
- Avoid stretching hypermobile joints; teach stretching of 2-joint muscles instead;
- Education regarding joint protection strategies, proper posture, and safe body mechanics;
- Avoid unnecessary self manipulations and prophylactic chiropractic or osteopathic adjustments (although manipulations may be warranted);
- Avoid end-range joint positions when resting—encourage more neutral postures;
- Encourage general fitness and weight management.

Exercise and manual techniques points of advice should include:
- Focus on dynamic stabilization and proprioceptive training;
- Address movement dysfunctions, postural control and alignment;
- Pace exercise conservatively, due to possible delayed reaction to overactivity;
- Encourage optimal joint mechanics with therapeutic exercise;
- Avoid joint stretching unless there is ROM loss due to injury, surgery, or immobilization;

joint rehab continued on the bottom of page 53

From the Ground Up

Rehabilitating the unstable ankle can be a delicate clinical challenge

By Jacon Chun, MPT, SCS, ATC, CSCS

Ankle sprains are among the most common injuries sustained in sports. Up to 40 percent of all athletic injuries are related to ankle sprains. Despite its high incidence and potential for morbidity, there is no agreed-upon standard for ankle sprain treatment.

Increased youth sports participation, encouragement by medical professionals to engage in fitness activities for health, and baby boomer weekend warriors looking to recapture the glory days, all contribute to the exposure to potential injury and the high incidence of ankle sprains.

Injury rates are greatest in sports that involve rapid changes of direction, jumping, running and cutting. Injury rates can reach as high as 50 percent in basketball players and 29 percent in soccer players.[1]

How it Happens

The typical mechanism of injury for lateral ankle sprains is forced plantar flexion and inversion of the ankle, usually with the body's center of gravity displaced outside the base of support. The most common anatomic sites injured are the lateral ankle ligaments (anterior talofibular ligament, calcaneofibular ligament and posterior talofibular ligament).

The anterior talofibular ligament helps prevent anterior translation and internal rotation of the talus, while the calcaneofibular ligament stabilizes the ankle and prevents talar tilt as the ankle moves from neutral into dorsiflexion. Damage to either, or both, could result in abnormal anterolateral motion of the talus, which is defined as ankle instability.

While the majority of ankle injuries involve the lateral ligamentous complex, most do not develop instability. Those that end up being unstable are usually believed to have an accompanying loss of mechanoreceptor function. Classified as either mechanical or functional, the concern with chronic ankle instability is that unbalanced loading and increased joint motion can lead to early degenerative changes. The potential end result of severe arthritis and pain is total ankle replacement or ankle fusion.

Addressing Functional Deficits

Ankle instability can be divided into two types: mechanical and functional instability. Mechanical instability is the abnormal laxity of the talocrural joint, resulting from damage to the ligamentous restraints. Functional instability is the subjective presence of pain and unreliability ("giving way"), even with the absence of increased joint laxity.

Treatment options for ankle instability vary and can range from physical therapy for strengthening weak muscles and retraining proprioception to surgical options for repair or reconstruction of the joint. Based on literature that suggests proprioceptive deficits or peroneal weakness as possible underlying factors, an initial conservative approach could be helpful in treating functional instability, especially in the absence of any mechanical and structural issues. A failed conservative approach might indicate the need to consider surgical alternatives to recreate stability in the ankle joint.

For conservative, pre-surgical and post-operative rehab, most authors advocate strengthening muscles around the ankle combined with well-timed proprioceptive exercises to restore proper ankle biomechanics and function.

Progressive Loading Techniques

Unstable, injured and post-surgical ankles can be difficult to rehab, however, as weight-bearing can aggravate the condition or delay healing. For this reason, clinicians are turning to modern technology to help.

One option are treadmills that offer an unweighting feature, either through a harness system, being submerged in a pool, or through differential-air-pressure (DAP) technology. DAP progressively loads patients by precisely controlling the level of weight-bearing through the lower-extremity joints.

Therapists can find the exact amount of body weight that will allow pain-free closed-kinetic-chain activity and help protect healing tissue while encouraging AROM and stimulation of proprioceptors. Users can engage in dynamic balance activities in a safe environment, thus restoring normal gait and running mechanics sooner. The large effective range of progressive loading, from 20- to 100-percent body weight, ensures that a wide range of patients, with a variety of diagnoses, can benefit.

Once supported in the treadmill, patients can perform any closed-chain activities inside the unit that they can outside. A patient in the early stages of ankle rehab may do squats, lunges, single-limb squats or calf raises at a reduced body weight. This activity modification encourages lower-extremity joint ROM without placing stress on the healing tissue in the ankle. At the same time, proprioceptors are stimulated, co-contraction of dynamic ankle stabilizers is facilitated, and gentle loading for cartilage and bone health is promoted.

As the patient gets more comfortable, gait training can begin at the same body-weight level that closed-kinetic-chain activities were tolerated. By keeping the load level the same, impact should not increase and tissue stress

KYLE KIELINSKI

should not rise. The goal is restoration and maintenance of normal lower-extremity mechanics without pain.

Higher-level patients can perform more dynamic skills and activities. From proprioceptive challenges on a pad or disc, to multitasking activities like catching or throwing a ball, DAP can provide a safe environment to protect them from reinjuring the ankle while relearning these activities. Plyometric bounding activities can even be performed with reduced joint impact, allowing athletes to carefully resume sport-specific and functional training sooner in the rehab program. ■

Reference

1. Smith, R., & Reischl, S. (1986). Treatment of ankle sprains in young athletes. *The American Journal of Sports Medicine*, 14(6), 465-471.

Jacon Chun is owner of Elite Sports Physical Therapy, with locations in Fremont and Dublin, CA, and clinical specialist for AlterG, makers of the Anti-Gravity Treadmill.

Case Study: Rehab for the Post-surgical Ankle

A 31-year-old male endurance athlete (triathlete and marathoner) was treated post-operatively for right ATF and CF reconstruction, peroneus longus repair and anterior talocrural joint debridement.

At four weeks post-op, the patient started a walking program on an air-pressurized unloading treadmill using differential air pressure (DAP) at 60 percent body weight, 1.5 mph and no incline. The focus was on proper gait mechanics and the patient was required to have pain rating of 2 or lower on the VAS.

During the next week (five), the patient was allowed to increase speed and duration on the anti-gravity treadmill to 2.5-3 mph for 20 minutes. The patient was allowed to increase body weight in 5 percent increments, as long as gait mechanics stayed normal and pain levels did not increase.

At week six, the patient was ambulating at 90 percent body weight, and was therefore allowed to start jogging at 70 percent body weight at 4.5 mph. Running speed and duration were increased in subsequent sessions, as long as no deviations were present and the pain level did not increase. By week eight post-op, the patient returned to running at full body weight with normal mechanics and no complaints of pain.

With the current focus on maximizing rehabilitation outcomes, the ability to combine closed-kinetic training with proprioceptive re-education earlier in the recovery process is important for those diagnosed with ankle instability.

Proper application of these rehabilitation principles, with the assistance of DAP technology, can potentially help some avoid surgery, as well as ensure that those requiring ankle stabilization achieve a favorable end result.

Matt Kraemer, PT, DPT, ATC, CSCS, is clinical director at Endurance Rehabilitation in Phoenix, AZ.

Symptom Equalizer

A patient at WSPT in Bronx, NY, performs aquatic lunges with hydrobells to improve balance, gait and functional strength.

Aquatic therapy helps patients with MS manage

By Daniel Seidler, MSPT

Multiple sclerosis (MS) is a chronic, often disabling disease that attacks the central nervous system (CNS). MS is generally diagnosed between the ages of 15 and 50 years, with a majority of people in their thirties when they are diagnosed. Clinical manifestations of MS vary significantly among individuals, correlating with the localized areas of demyelination in the CNS.

A patient with MS might present with any combination of sensory, motor, visual, bowel/bladder, sexual and cognitive/emotional deficits. The progress, severity, and specific symptoms of MS are unpredictable and vary from one person to another. Physical therapists may not treat all of these disorders in a patient with MS, but they do need to be considered in the plan of care.

Today, new treatments and advances in research are giving new hope to people affected by the disease. Physical therapy is an essential part of managing MS and many different approaches have proven effective. Treatment of patients with MS usually focuses on restoring ROM, managing tone, improving strength/endurance/coordination, and educating on energy conservation. Depending on the level of deficit, bed mobility, transfers, balance, gait training and other functional areas may need to be addressed.

PTs have multiple strategies, techniques and devices that are effective in the treatment of a patient with MS. Because of the population's often complicated presentation, water is a great equalizer. The aquatic environment offers many features that benefit someone with MS. First, buoyancy provides a sense of weightlessness and assists with movement and balance. Second, viscosity offers smooth, consistent resistance for safe strengthening exercises. Hydrostatic pressure is effective in reducing swelling and provides proprioceptive feedback. Lastly, the warmth of the pool provides a comfortable environment and reduces pain.

In combination, these properties of water lead to the numerous benefits of aquatic therapy. This intervention has been shown to normalize tone, dampen ataxia, improve motor planning, improve sensory feedback loops, enhance reaction time, create alternative cognitive pathways for functional tasks, decrease pain, and improve posture, weight-bearing, balance, gait and proprioception.

At Westchester Square Physical Therapy (WSPT) in Bronx, NY, we often use a combined program of land-based and aquatic-based therapy. Aquatic therapy is effective for improving movement, strength, and balance in a forgiving, comfortable, effective environment. We use land therapy to implement the functional improvements gained in the pool.

Varied Aquatic Environments

Different aquatic environments offer different benefits for a patient with MS. In a pool with deep water, a PT might have the patient perform deep-water running or movement exercises while wearing a life vest. Exercising in deep water with varying amounts of flotation devices affects the mobility, strength and coordination needed to stabilize and stay afloat. Deep-water aquatic therapy as well as swimming can be very challenging and effective in the treatment of MS.

At WSPT, we have a therapy pool with a treadmill built into the floor. We take advantage of the treadmill, parallel bars, resistance jets and steps. Most of our MS patients do a program with their feet on the ground throughout each session. We also emphasize exercises that connect the uppers to the lowers through the core. For example, squats in umbilicus-height to chest-height water in front of resistance jets require multi-plane stability using the uppers, lowers and core to work through the range of motion. To test the patient's awareness further, we'll have her repeat the movement for several sets facing all four directions. We can implement other variables by changing the intensity of the resistance jets, width of the patient's stance or position of her arms.

Gait training on the aquatic treadmill is effective because the patient is in the buoyant environment of the pool without having to progress through the water. Walking on the treadmill is a different experience than walking in a level-surface pool. There is no sense of slogging, but the patient is forced to maintain a consistent rhythm.

The parallel bars can be used for assistance, particularly for patients with severe weakness or balance deficits. Our pool also has two portholes, in the front and on the right of the treadmill, where we've placed video cameras that are seen on a screen in front of the patient. This provides immediate feedback to the patient and assists the PT in verbally cuing the patient.

We also have an aquatic access chair to transfer patients into and out of the pool as needed. Because stairs are easier to negotiate in the pool, we practice with patients who initially need to use the chair to enter and exit the pool. The goal is to eventually not use the chair, which has obvious functional carryover outside of PT.

At WSPT, we've partnered with the MS Society of New York City and Southern New York to be a referral source for patients who need PT and would like to try aquatics. ■

Daniel Seidler is executive director, Westchester Square Physical Therapy (WSPT) in Bronx, NY.

WESTCHESTER SQUARE PHYSICAL THERAPY

Patient Perspective

As executive director of Westchester Square Physical Therapy (WSPT) in Bronx, NY, I recently had a conversation with Ralph, a patient diagnosed with multiple sclerosis in April 2005, about his experience with aquatic therapy in my center. Physical therapy is an integral part of many MS patients' lives and their story is part of our story.

Ralph's story is just one example of how aquatic therapy can make a difference in a patient's life. The increased prevalence of pools in PT clinics will surely bring additional uses and maybe even breakthroughs in the treatment of MS.

What are some of the PT treatments you currently do?
Ralph: When I come for therapy, I ride the bike and do regular exercise. My physical therapist gives me a full stretch and that helps dramatically. The pool is phenomenal. The problem with MS is sometimes you don't lift up your leg when you walk and you don't consciously know that. In the pool, when I walk on the treadmill, I can see my legs on the video screen in front of me and that tells me that I'm dragging my right foot.

Do you find it much easier to walk in the pool?
Ralph: The water makes you lighter. It makes it easier for you to walk and you can see yourself walking. When I came here in 2005, I was walking with a walker and my wife would drive me to PT. Now I walk with a cane and I'm driving. I see the difference when I don't come to PT for a week.

What other exercises do you do in the pool?
Ralph: I do squats to strengthen my legs. I do this walking through an obstacle course.

Some PTs are concerned about having a patient with MS go in a warm pool. Has this ever been an issue for you?
Ralph: It is true that the warmth can exacerbate your problems with MS, but the pool temperature (89-92 degrees) seems to be ideal for me. I do get tired if I run or push myself, but that's because I'm working harder. When I go to the Caribbean, I get hot and that affects me, but not the pool.

Have you noticed any other functional improvements?
Ralph: I've been able to return to driving because I feel a lot more strength in my legs. That has given me my independence back. I've always been someone who drives and when I couldn't do that a few years ago, it affected me emotionally. Now I don't have to depend on anyone to take me places. Also, when I don't stay consistent with my PT, I can feel the difference. Sometimes I'll be a little tired after PT, but I always feel much better the day after.

What else can you tell me about your aquatic therapy experience?
Ralph: At the beginning, I needed to use the aquatic access chair to get in and out of the pool. Now I walk down the stairs to get in and sometimes I walk out. When I am fatigued, I'll use the chair, so I appreciate the option.

—Daniel Seidler

Ready, Set, Work?

Use the right tools to determine when a worker is ready to return to the job

By Shane Haas, PT, MSIE, CPE

We're not ready for you to come back to work unless you are 100-percent," states Joe Safety Man/HR manager at ABC Widgets Inc. Statements like this raise questions: What does 100 percent mean? How is 100 percent determined? Is there any objective information available? What are the job demands? What happens if the patient is not at 100 percent?

How is the patient expected to get to 100-percent if there is no return-to-work program? The ability to help answer questions like these underscores the value of functional capacity evaluations (FCEs) and work-conditioning programs (WCPs). FCEs provide the information needed to help make informed return-to-work decisions, while WCPs provide a means for return-to-work when the injured employee is not at 100 percent.

While technical definitions vary, FCEs are physical exams that test elements of how we work. Work is comprised of a series of body postures (Table 1) and manual-material-handling (MMH) activities (Table 2). While testing methods vary, FCEs ultimately assess a patient's tolerance to body postures and capabilities in MMH activities. In simple terms, when a patient's measured physical capabilities exceed those noted to be required at work, then the patient is "ready" to return to work. Conversely, when results of a FCE show these capabilities fall short of job demands, then the patient is not ready to safely return to work.

Because the capacity-to-work comparison is at the heart of the return-to-work decision, it is important to get a thorough understanding of job demands. This understanding is typically gained by interview (patient and employer), review of job descriptions and, when necessary, a visit to the job site. When job information is lacking or conflicting, a visit to the job site should be strongly considered to help determine accurate work demands.

In instances when return-to-work is not indicated, the results of the FCE are helpful in the construction of an effective WCP. WCPs are work-specific exercise programs that focus on returning the patient to work. Serving as the entry exam for WCPs, FCEs establish job goals and quantify the physical and functional deficits that interfere with work. By providing a way for patients to continue to build their physical capacity, WCPs fill a void in the return-to-work process when there are no company-sponsored RTW programs. Major elements of FCEs that help WCP design include:

Postural Tolerance Testing. The goal of postural tolerance testing is to measure how the body responds to repeated or prolonged postures in the absence of significant external loading. Though lack of standardization exists, FCEs commonly test basic working postures (Table 1). Postural tolerance testing typically involves the patient holding or repeating a specific posture for a given time period, during which observations and measurements are taken.

Table 1. Posture Tests

Stand
Walk
Squat
Kneel
Bend/stoop
Twist
Climb
Grasp/squeeze
Wrist flex/extend
Overhead reaching
Far reaching

MMH Testing. The goal of MMH tests is to determine the strength and endurance of the patient in carrying, pushing, pulling and lifting tasks. Again, despite a lack of universally accepted strength or endurance testing procedures, FCEs typically rely on progressively increasing loads until a maximum value is reached.

The Right Response

The observations and measurements taken during the tests described above are integrated to develop WCPs (assuming the affected postures and MMH tasks are required at work). Three basic response groups are noted and described in greater detail below: fatigue-dominant, movement-dominant and pain-dominant.

Fatigue-dominant are those postures or MMH tasks that fatigue the patient but do not increase pain. The goal with these postures and tasks is to improve muscle strength and endurance by gradually increasing the volume of practice. If the work focuses on endurance-based MMH tasks, then the WCP should include higher repetition (>15) or extended practice times (>3 to 5 minutes). In power-based MMH tasks, lower repetitions (<6) and shorter practice times (<1 minute) should be used. One-repetition maximum (1-RM) tables are useful to set initial training weights, while titration is helpful to safely increase loads. For example, consider a load of 25 pounds lifted on

Table 2. MMH Activities
Floor-to-knuckle lift (FK)
12-inch-to-knuckle lift (12K)
Knuckle-to-shoulder lift (KS)
Shoulder-to-arms-reach lift (SAR)
Carry
Push
Pull
Combination lift (12K + carry)
Repeat lifts

floor-to-knuckle lift, and a job requirement of 40 pounds at a rate of one per hour (power-based MMH task). Based on 1-RM tables (www.exrx.net/Calculators/OneRepMax.html), the starting weight should be 20 pounds for six reps of practice. Titration, or progressively increasing the load within a target range of repetitions, helps direct load increases until the 40-pound requirement is reached.

Movement-dominant is used to describe postures and MMH tasks limited by poor quality of movement, incomplete range of motion or acceptable increases in pain levels. Such postures and tasks are included in WCPs; however, a higher level of supervision is needed. Because of the increased potential for worsening symptoms, care should be exercised in adding these postures to the WCP.

Efforts should be made to provide appropriate training on proper movement strategies, such as lifting mechanics. Limits should be set (e.g., times, ranges of motion, maximum pain levels) to help mitigate the risk of worsening symptoms. Additionally, postures or MMH tasks may be "broken down" and practiced in isolation to avoid elements that worsen symptoms.

Patient feedback will ultimately determine whether or not patients will be able to progress. Positive feedback—improved confidence, less pain—signals it is time to loosen limits or return to whole-posture practice. The goal is to gradually relax limits and build capacity. Patients who continue to progress in this manner will ultimately mirror the progression patterns of fatigue-dominant patients. However, negative feedback signals the patient is not able to progress in a given posture or MMH task. Patients unable to progress will benefit from the strategies noted below for pain-dominant postures and tasks.

"Pain-dominant" describes postures and MMH tasks limited by unacceptable levels of pain. Such postures and tasks increase pain to a level that makes the patient want to stop. WCPs provide good opportunities to learn compensatory strategies and/or test potential job accommodations. The goal of each is to avoid the postures or tasks that create unacceptable levels of pain. An example of a compensatory strategy is a patient with poor knee function learning to use a stoop lift instead of a squat lift. The WCP helps the patient learn to keep items close to the body when lifting and provides time to improve hip and back extensor strength to compensate for not using the knee.

An example of a job accommodation is to use a mechanical lift to hoist the 40 pounds off the floor once every hour. The WCP provides time to learn to use the lift and assess the effects of this change on the body. Because the gamut of compensatory strategies and job accommodations is so broad, it may prove useful to consult an ergonomics professional to assist in this area.

Framework for Discharge

Not only do FCEs serve as valuable entrance exams for WCPs, but they also provide the framework for interim and discharge tests. Repeat FCEs focus on the postures and MMH tasks noted to be limited on the initial FCE. If upon retesting, the patient's physical capacities now meet or exceed the job requirements, then he is ready to return to work.

However, if the results of the repeat FCE indicate the physical capabilities do not meet the job demands, the patient is still not ready to safely return to work. In such instances, additional work conditioning may be helpful, particularly if improvements are noted and positive feedback is being provided by the patient. However, if measured gains are not noted and negative feedback is being provided, continuing the WCP will likely be of limited value.

While the aspects of FCEs and WCPs discussed in this article appear straightforward, return-to-work issues are frequently quite complicated. Whether simple or complex, FCEs and WCPs enhance RTW programs by providing information to make informed decisions.

They also fill the void created by companies demanding that injured employees be "100-percent" before coming back to work. With FCEs and WCPs, you can respond that while the patient may not be at 100 percent, he is at 63 percent with plans to continue to build strength and endurance until he makes it back to 100 percent and full return to work. ■

Shane Haas is a physical therapist with a graduate degree in industrial engineering, and is board certified as a professional ergonomist through the BCPE. Over the past 10-plus years, he has worked in multiple areas of return-to-work. Contact him at shane@adaptitweb.com

New Orleans to Host NATA Meeting

New Orleans will host the National Athletic Trainers Association's 62nd Annual Meeting & Clinical Symposia on June 19-22, 2011.

The NATA Annual Meeting & Clinical Symposia offers educational advances, career networking, association business and social opportunities. The NATA Trade Show is the largest display of athletic training supplies and services in the country, according to NATA.

The NATA will induct 10 new members into its Hall of Fame during the meeting: Marcia Anderson, PhD, ATC, LAT, of Bridgewater State University; Chuck Kimmel, ATC, LAT, of Appalachian State University; Marjorie King, PhD, ATC, PT, of Plymouth State University; Larry Leverenz, PhD, ATC, of Purdue University; Andy Paulin, ATC, of Mt. San Antonio College; Jerry Robertson, ATC, of Watauga Orthopaedics PLC; Larry Starr, ATC, LAT, of Starr Athletic Solutions LLC; Barrie Steele, MS, ATC, LAT, of the University of Idaho; Jerry Weber, ATC, PT, of the University of Nebraska; and Roy Don Wilson (posthumous; deferred from 2010).

In addition, NATA will release its position statement on Safe Weight Loss and Maintenance Practices in Sport and Exercise at a national press conference on June 20. The statement will be published in the June issue of the *Journal of Athletic Training*. Speakers will include members of the position statement writing group, a member from the American Academy of Pediatrics, and representatives from Louisiana State University and Tulane University.

NATA is the professional membership association for athletic trainers and others who support the athletic training profession. Founded in 1950, NATA has grown to more than 30,000 members worldwide. ■

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JUNE 24-25, 2011 — **CROMWELL, CT**
JULY 22-23, 2011 — **LOS ANGELES, CA**
SEPT. 24-25, 2011 — **JEFFERSON CITY, MO**

Geriatric Therapeutic Exercise

Speaker: Mark Traffas, PT, GTC. Exercising geriatric patients presents a unique challenge to therapists. This course will demonstrate different, evidence-based exercise techniques and innovative interventions for all of the body's major joints as well as for the most common diagnoses seen in older patients (i.e., stroke, Parkinson's disease, gait and balance deficits). You will learn how to use functional tools to establish and guide exercise programs. Don't miss this opportunity to enlarge your arsenal of treatment ideas. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JUNE 24-25, 2011 — **FRAMINGHAM, MA**
JULY 22-23, 2011 — **WILKES-BARRE TWP, PA**
NOV. 5-6, 2011 — **NASHVILLE, TN**

Unraveling the Maze of Neurological Diagnoses

This course will provide therapists with a new perspective for improving outcomes in their patients with neurologic deficits. Participants will learn an evidence based approach to selecting the most appropriate interventions based on functional prognosis and learn when and how to facilitate recovery versus facilitate compensation. Common movement abnormalities for multiple neurological patient populations including Stroke, Parkinson's Disease, Spinal Cord Injury, Multiple Sclerosis, Huntington's disease and Dementia will be discussed. Speaker: Roseanne Thomas. **Contact:** Education Resources, Inc., 800-487-6530; 508-359-6533; www.educationresourcesinc.com

JUNE 24-25, 2011 — **HARRISBURG, PA**
SEPT. 24-25, 2011 — **CHARLESTON, SC**
OCT. 14-15, 2011 — **PROVO, UT**

Rehabilitation for The Frail Elderly

Speaker: Robert Thomas, MS, PT. Learn the latest information on 30 assessment tools and treatment protocols for working with the frail older population. Information on the effects of institutionalization, medical and cognitive pathologies that affect the frail population, pharmacological management, and the impact of reimbursement models will be presented. Specific evaluations and creative treatment protocols for gait, balance, strength, flexibility, and endurance will be provided. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JUNE 25-26, 2011 — **BRADENTON, FL**
JULY 16-17, 2011 — **PHOENIX, AZ**
SEPT. 24-25, 2011 — **SOUTHFIELD, MI**

Myokinematic Restoration

Advanced lecture and lab course explores biomechanics of contralateral and ipsilateral myokinematic lumbo-pelvic-femoral dysfunction. Treatment emphasizes restoration of pelvic-femoral alignment and recruitment of rotational muscles to reduce synergistic patterns of pathomechanic asymmetry. Emphasis on restoration, recruitment and retraining activities using rotators of the femur, pelvis and trunk. Techniques to inhibit overactive musculature will enable the course participant to restore normal resting muscle position. Learn assessment and management skills when treating "piriformis syndrome", right SI joint dysfunction, and low back strain. Mention this ad to receive a 5% tuition discount. **Contact:** Postural Restoration Institute, 888-691-4583 (toll-free); www.posturalrestoration.com

JUNE 25-26, 2011 — **PITTSBURGH, PA**
JULY 16-17, 2011 — **SAN FRANCISCO, CA**
SEPT. 24-25, 2011 — **SAN DIEGO, CA**

Baby Steps: Ambulation Interventions Birth to 3

The impact of biomechanics, the neuromuscular system, the sensory system, orthotics, tone management, and equipment will be integrated as you learn to build intervention strategies to address ambulation early and effectively in infants and toddlers with diagnoses such as CP, developmental delay, prematurity, and Down Syndrome. This top-rated, standing-room-only course includes lecture, videos, lab, and group problem solving. Instructor Jan McElroy, MS, PT, PCS, draws from 35 years of pediatric experience. This one fills fast - register early! **Contact:** Care Resources, 888-613-2275 or www.careresourcesinc.com

JUNE 25-26, 2011 — **FAYETTEVILLE, NC**
JULY 22-23, 2011 — **DENVER, CO**

Evaluating and Treating Torticollis and Plagiocephaly

Learn everything you need to know about evaluating and treating torticollis and plagiocephaly. This unique course also covers the topics of Sudden Infant Death Syndrome, Developmental Delay, the Back to Sleep Program and proper car seat use and fit. After the two day course, you will be able to confidently explain these topics to your patients parents and address their questions and concerns as related to torticollis and plagiocephaly. Learn the effective treatment program that is consistently successful and easily documented in an objective way. Early registration is $295 1 month prior, $345 up to two weeks before course. You will get hands on experience with techniques in the lab portion of the course. **Contact:** eaglepeds@knology.net with questions; or visit www.EagleRehabPT.com to download a brochure for registration.

JUNE 25-26, 2011 — **FREEHOLD, NJ**
JULY 22-23, 2011 — **OMAHA, NE**
SEPT. 30-OCT. 1, 2011 — **IDAHO FALLS, ID**

Rehab for Persons with Dementia: Making Therapy Worth It

Speaker: Susan Staples, PT, GCS. This seminar provides participants with specific evaluation and treatment strategies that are critical to improve outcomes for this challenging and rapidly growing patient population. Included are strategies for gait, balance and falls, mobility, hip fractures, strength/ROM, cardiopulmonary and pain issues, seating and positioning, restraints, and behavioral problems. Participants will

(Continued on next page)

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also gain a thorough understanding of the different types of dementia with specific communication and approach strategies for success. The speaker provides an evidenced based seminar with an extensive handout. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JUNE 25-26, 2011 — **LOS ANGELES, CA**
AUG. 20-21, 2011 — **EDISON, NJ**

Assessment & Treatment Age-Related Balance Impairment

This intensive two-day course is designed to provide evidence-based fall prevention strategies for reducing the number of falls in the elderly population and discuss balance treatments for inpatients as well as community-based falls prevention programs. Through interesting lecture and hands-on labs, this course will provide skills that can be used in the clinic setting the very next day. Over 80% of attendants rated this course Excellent, all others rated it Good. Cost: Only $350 for 16 hours. CEUs vary from state to state. **Contact:** JVB Enterprises, Inc., 888-328-6755; or www.teachtx.com for other courses offered in your area or for more information.

JUNE 25-26, 2011 — **NAPLES, FL**
SEPT. 10-11, 2011 — **JACKSONVILLE, FL**
OCT. 22-23, 2011 — **FINDLAY, OH**

Sara Meeks Seminars On Osteoporosis - Level I

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JUNE 25-26, 2011 — **NASHVILLE, TN**
SEPT. 24-25, 2011 — **PHOENIX, AZ**
OCT. 15-16, 2011 — **SAN FRANCISCO, CA**

Put Some Muscle Into Ther Ex

Speaker: Wendy K. Anemaet, PT, PhD, GCS, CWS, GTC, COS-C; Strength loss begins in the 30's-but what's next? MMT's unreliable-what other options exist. Which muscles matter most to ADL? Join us for an intensive, fun, 2-day tune up to strengthen your outcomes & change the way you prescribe Ther Ex on Monday morning! Explore the current scoop on geriatric resistance training, practice evaluative techniques & exercises, and learn about parameters of strengthening for a range of medical & rehab diagnoses. Put Some Muscle into Ther Ex offers the essential tools & knowledge to design, implement, evaluate & modify effective resistance training programs for the older populations. - See you there. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JUNE 25-26, 2011 — **LOUISVILLE, KY**
SEPT. 24-25, 2011 — **OLYMPIA, WA**
NOV. 5-6, 2011 — **PALM SPRINGS, CA**

Acute Care Rehabilitation

Speaker: Mark Nelson, MPT. This dynamic seminar provides the latest information on cardiac, pulmonary & geriatric rehab in the acute care setting. As in all practice settings, acute care rehab is continuously evolving. From the various entry points into the acute care setting to discharge, rehab plays an integral role. Therapists are being increasingly relied upon to make significant contributions to the medical team and frequently are the determining factor in hospital length of stay. This high tech seminar will provide therapists with clinical information, practical tips & high level problem solving skills by utilizing lecture & case studies to discuss the role of therapists in this challenging environment. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JUNE 25-28, 2011 — **BOSTON, MA**
JULY 7-10, 2011 — **ST. LOUIS, MO**
SEPT. 8-11, 2011 — **PITTSBURGH, PA**

Intro to NDT Part I Improving Gait Faster Part II

Achieve functional outcomes for adults with hemiplegia. Content includes the principles of NDT, facilitation of sit-to-stand, use of the LE in functional activities, transfers, UE weight bearing, remediation of pain and subluxation of the hemiplegic shoulder. Bed mobility will be demonstrated. Treatment ideas and a framework to document goals based on functional outcomes using NDT will be provided. Get to results faster when improving gait. Increased clinical reasoning will enable you to know what to expect and what to predict. You will be able to assess the cause of the problem and have more immediate influence. You will have a better understanding of the normal components of gait and then understand why your patient with hemiplegia has tendencies in gait. You will practice with "hands-on" how to increase ROM of the hip and foot. Concepts for use of a self-exercise program and use of orthotics will be discussed. Additional treatment ideas related to gait and more examples of documentation will be provided. Both parts include videotapes, "hands-on" experience and live patient demonstrations. Cathy Runyan, OTR, & Peggy Miller, PT, NDTA Inc. Certified Instructors. Audience: PTs, PTAs, OTs, COTAs. Contact hours: 30. **Contact:** Recovering Function, 408-268-3691; or www.RecoveringFunction.com for a complete brochure of introductory, advanced, and certification courses as well as information about additional course dates/locations, group rates, & free registrations when hosting courses at your facility.

JUNE 25-28, 2011 — **CHARLOTTE, NC**
AUG. 27-30, 2011 — **CHATTANOOGA, TN**

Lymphedema Management Seminar

The Academy of Lymphatic Studies has pioneered lymphedema management in the U.S. since 1994. This course serves as an introduction to the management of upper and lower extremity lymphedema (primary and secondary) and is focused on increasing the understanding of proper lymphedema management and the application of the techniques known as Manual Lymph Drainage (Vodder/Foeldi technique) and Complete Decongestive Therapy for lymphedema and other conditions. The 31 hour program is taught in only 1 1/2 working days; the course length is 3 1/2 days in total. The program covers the anatomy, physiology and pathophysiology of the lymphatic system and the introduction in the current treatment techniques for upper and lower extremity lymphedema. The textbook "Lymphedema Management" authored by the Academy's director was published in 2004 by Thieme Medical and Scientific Publishers, NY, and is included in the tuition. Discounts are available for APTA & AOTA members. **Contact:** 800-863-5935; academy@acols.com or www.acols.com

JULY 5-22, PST — **ONLINE WEBCAST**

Complex Shoulder/Elbow/Knee Rehab

This program by APTA credentialed clinical instructor Rick Daigle, PT, DPT, features biomechanics of the shoulder, elbow and knee and the latest surgical techniques and best-practice rehab protocols and trends. Viewers will learn biomechanical assessment and clinical problem solving skills to formulate a treatment strategy for the individual patient. This seminar will benefit therapists, athletic train-

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Manual Therapy and Orthopaedic Seminars
2011 Seminar Calendar

CONTINUING EDUCATION SEMINARS

Stanley V. Paris, PT, PhD, FAPTA

S1 - Spinal Evaluation & Manipulation
Impairment Based, Evidence Informed Approach
35 Hours, 3.5 CEUs (No Prerequisite)
$895

Boston, MA	Furto	Jun 22 - 26
Cincinnati, OH	Furto	Aug 10 - 14
St. Augustine, FL	Viti	Aug 17 - 21
Orlando, FL	Yack	Oct 5 - 9
Baltimore, MD	Smith	Nov 11 - 15
Phoenix, AZ	Yack	Nov 16 - 20
Austin, TX	Viti	Dec 7 - 11

S2 - Advanced Evaluation & Manipulation of Pelvis, Lumbar & Thoracic Spine *Including Thrust*
21 Hours, 2.1 CEUs (Prerequisite S1)
$595

Baltimore, MD	Viti	Jul 15 -1 7
Chicago, IL	Irwin	Jul 22 - 24
New York City, NY	Yack	Aug 5 - 7
St. Augustine, FL	Irwin	Oct 7 - 9
Grand Rapids, MI	Yack	Nov 4 - 6

S3 - Advanced Evaluation & Manipulation of the Cranio Facial, Cervical & Upper Thoracic Spine
27 Hours, 2.7 CEUs (Prerequisite S1)
$795

New York City, NY	Rot	Jun 23 - 26
Atlanta, GA	Smith	Aug 11 - 14
Denver, CO	Rot	Sep 8 - 11
Boston, MA	Smith	Oct 20 - 23
New Orleans, LA	Rot	Nov 17 - 20
St. Augustine, FL	Paris/Smith	Dec 1 - 4
Ft. Lauderdale, FL	Smith	Dec 10 - 13

S4 - Functional Analysis & Management of Lumbo-Pelvic-Hip Complex
15 Hours, 1.5 CEUs (Prerequisite S1) **$545**

Boston, MA	Lonnemann	Jul 30 - 31
Minneapolis, MN	Lonnemann	Aug 13 - 14
San Diego, CA	Nyberg	Aug 20 - 21
St. Augustine, FL	Varela	Sep 10 - 11
New York City, NY	Nyberg	Sep 17 - 18
Orlando, FL	Lonnemann	Nov 5 - 6
Atlanta, GA	Nyberg	Nov 12 - 13
Chicago, IL	Nyberg	Dec 10 - 11

E1 - Extremity Evaluation and Manipulation
30 Hours, 3.0 CEUs (No Prerequisite)
Also Available to OTs **$745**

Austin, TX	Naas	Jul 21 - 24
San Francisco, CA	Turner	Jul 28 - 31
Boston, MA	Busby	Aug 18 - 21
Phoenix, AZ	Turner	Aug 25 - 28
St. Augustine, FL	Baldwin	Sep 15 - 18
Harrisburg (Dillsburg) PA	Naas	Oct 13 - 16
Denver, CO	Turner	Nov 3 - 6
St. Louis, MO	Naas	Nov 3 - 6
Washington, DC	Baldwin	Dec 15 - 18

E2 - Extremity Integration
21 Hours, 2.1 CEUs (Prerequisite E1)
$595

San Diego, CA	Patla	Jul 22 - 24
Baltimore, MD	Conrad	Sep 9 - 11
New York City, NY	Patla	Oct 21 - 23
Chicago, IL	Conrad	Nov 11 - 13
St. Augustine, FL	Patla	Nov 18 - 20

Advanced Manipulation Including Thrust of the Spine & Extremities
20 Hours, 2.0 CEUs (Prerequisite: Completion of MTC Certification) **$775**

San Diego, CA	Irwin/Yack	Aug 19 - 21

MF1 - Myofascial Manipulation
20 Hours, 2.0 CEUs (No Prerequisite)
$595

Scranton, PA	Grodin	Jun 24 - 26
St. Augustine, FL	Cantu	Jul 29 - 31
Ft. Lauderdale, FL	Grodin	Aug 5 - 7
Atlanta, GA	Grodin	Aug 12 - 14
Baltimore, MD	Cantu	Sep 30 - Oct 2
New York City, NY	Grodin	Oct 14 - 16
Las Vegas, NV	Stanborough	Oct 21 - 23
Chicago, IL	Grodin	Nov 11 - 13
Boston, MA	Grodin	Dec 9 - 11
San Diego, CA	Cantu	Dec 16 - 18

MANUAL THERAPY CERTIFICATION Preparation and Examination
32 Hours, 3.2 CEUs
(Prerequisites: S1, S2, S3, S4, E1, E2, MF1) **$995**

San Diego, CA	Paris et al	Jul 11 - 16
St. Augustine, FL	Paris et al	Nov 28 - Dec 3

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Additional Seminar Offerings

Applied Musculoskeletal Imaging for Physical Therapists
21 Hours, 2.1 CEUs (No Prerequisite) **$545**

San Diego, CA	Agustsson	Jul 29 - 31
Denver, CO	Agustsson	Nov 11 - 13

The Pediatric Client with a Neurological Impairment
29 Hours, 2.9 CEUs (No Prerequisite)
Also available to OTs **$625**

St. Augustine, FL.	Decker	Jun 16 - 19

CF 2: Intermediate Cranio-Facial
20 Hours, 2.0 CEUs (Prerequisite CF 1 available as a Seminar or Online) **$595**

St. Augustine, FL	Rocabado	Jul 9 - 11

CF 3: Advanced Cranio-Facial
20 Hours, 2.0 CEUs (Prerequisite CF 2) **$595**

St. Augustine, FL	Rocabado	Jul 11 - 13

Residency and Fellowship Opportunities Available!

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Seminar dates, locations, and tuition are subject to change, please call before making any non-refundable reservations.

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Team Discount - Two or more persons from the same facility registering for the same seminar at the same time, receive a 10% discount at the time of registration.
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Multiple Seminar Discount - Register and pay in full for two or more seminars at the same time and receive a 10% discount.
(May not be combined with any other discounts or previous registrations.) ADV 6-11

(Continued from previous page)

ers and physiologists in their delivery of workout regimens to their rehabilitating clients. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 6-26, MST **ONLINE WEBCAST**

Stroke and Neuromotor Rehab

This course is designed to give you the theory behind CIMT and why it plays such an important role in rehabilitating stroke survivors as well as for children with hemiplegic CP. Through labs and case studies Dr. Earley will give you tools to properly evaluate a patient to determine if CIMT is the most effective therapy. You will gain experience using CIMT and modified CIMT as well as understand how to integrate skills such as Bobath, Brunnstrom, PNF, Rood therapy and other methods. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 7-24, CST **ONLINE WEBCAST**

EBP Treatment of Shoulder Disorders

This seminar will help advance your expertise in evaluating and treating shoulder disorders. The instructor will discuss the pathoanatomy of the shoulder and the assessment of dysfunction around the scapulo-thoracic and gleno-humeral joints utilizing case studies of recurring, complex shoulder problems. Evidence-based interventions are presented and analyzed for a variety of diagnoses. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 8-25, MST-PT **ONLINE WEBCAST**

Assessment & Treatment of Shoulder Disorders

This pivotal webcast by Robert McCabe, MS, PT, OCS, features biomechanics of the shoulder, the latest surgical techniques and best-practice rehab protocols and trends. The objectives have been designed to fill the gap for therapists between standard evidence-based approaches to rehab and the practical, clinical management of shoulder pathologies. All therapists seeking to improve patient care outcomes through the thorough examination and evaluation of patients with shoulder dysfunction will benefit from this webcast. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 8-25, EST **ONLINE WEBCAST**

Rehab Group Therapy Activities for OT/PT

This webcast features the latest tools, strategies and documentation procedures to develop group therapy programs. Participants will get the tools to prepare and modify group therapy activities for optimal clinical and billing outcomes. In addition to learning why group therapy services are evidence-based, you will learn GT benefits as well as the latest CMS and managed care language describing the appropriate use of group therapy codes. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 9-19, 2011 **MINNEAPOLIS, MN**
SEPT. 10-20, 2011 **PHOENIX, AZ**
SEPT. 12-23, 2011 **MIAMISBURG, OH**

Complete Lymphedema Management Certification

The Academy of Lymphatic Studies has pioneered certification classes in Manual Lymph Drainage (Vodder/Foeldi technique) and Complete Decongestive Therapy in the U.S.

since 1994. This program is a comprehensive certification course (135 hours) and is taught in only 7 working days; the course length is 11 days in total, including 2 weekends (meets the requirements of the Lymphology Association of North America). The program covers: anatomy, physiology & pathology of the lymphatic system, basic and advanced techniques of MLD, bandaging for primary and secondary upper and lower extremity lymphedema (incl pediatric care and genital lymphedema) and other conditions (post-traumatic, postoperative swellings, CVI, Migraine). Special workshops are included in the course (insurance billing, certification for compression garments, etc.) The textbook "Lymphedema Management" (included in tuition) authored by the Academy's director was published in 2004 by Thieme Medical and Scientific Publishers, NY; tuition also includes educational CD, course manual, complete set of bandages, CD for limb volume calculation, set of posters of the "Lymphatic System". After course completion each student is provided with instructor mentoring. All graduates qualify for free lifetime listing as certified lymphedema therapists for patient referral on our website. All courses are approved by FPTA, IPTA and AOTA for CEUs. Discounts are available for APTA & AOTA members. Financial aid available. **Contact:** 800-863-5935; academy@acols.com or www.acols.com for a free brochure.

JULY 12-28, CST — **ONLINE WEBCAST**

Home Care: Hospital and Rehab of the 21st Century

This webcast by Varda Neuhaus, PT features tools, techniques and strategies for Home Care treatment. Whether its risk factors such as falls, gait/balance disorders, age related cognitive decline, orthopedic disorders or interventions to improve daily living, this course will prepare you for the next standard of geriatric care. Through real world examples, evidence-based treatments and "outside the box" thinking, you will be ready to produce better quality of living and improved outcomes for home care patients. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 12-29, MST — **ONLINE WEBCAST**

Shoulder Disorders & Injuries

This program covers exercise prescriptions representing evidence-based treatment of impingement, bicepital tendonitis, rotator cuff tears, humeral subluxations, acromioclavicular pain, bursitis, and thoracic outlet syndrome. Participants will explore the relationship of regional mechanical systems to recurring shoulder pain and will replace diagnosis specific protocols with an individualized methodology for assessment and treatment of muscular movements related to pain. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 13-15, 2011 — **LARGO, FL**
SEPT. 21-23, 2011 — **LARGO, FL**

Vestibular Rehabilitation Therapy

This three day workshop provides "hands-on" training and includes an overview of vestibular anatomy and physiology, extensive training materials for therapy programs, direct patient observation, business, and marketing concepts. The American Institute of Balance has successfully trained thousands of therapists from around the world and is one of the few institutions that provide certification. Course Director: Richard E. Gans, PhD, nationally known expert in Vestibular Testing and Rehabilitation, and author of Vestibular Rehabilitation: Protocols & Programs. Also, see a list of additional workshop topics or take advantage of our online courses. **Contact:** Karen Stephenson, 800-245-6442 for program questions; or visit: www.dizzy.com to register.

JULY 13-17, 2011 — **HOUSTON, TX**

Watsu II

Instructors: Cameron West. Location: Texas Children's Hospital, Houston, Texas 77030. **Contact:** Mitzi Wiggin, 832-826-6107 for more information; e-mail: mmwiggin@texaschildrenshospital.org or register online: www.texaschildrenshospital.org/pmr and click on continuing education.

JULY 13-29, EST — **ONLINE WEBCAST**

Home Care: Therapy and Documentation Strategies

This course taught by therapist and home health expert Phyllis Ehrlich features tools, techniques and strategies for Home Care treatment. Developed for OTs and PTs entering home care, this course provides creative and alternative ideas for better rehab in the home. The increase in the demand for home health professionals is expected to soar over the next decade. As fast as this demand is emerging so is the need for qualified therapists and clinicians to meet the need. **Contact:** Summit Professional Education, 800-433-9570; www.summit-education.com and use Priority Code: ADV0711

JULY 15-16, 2011 — **PHILADELPHIA, PA**

Geriatric Orthopedics: Treating The Spine, Pelvis and Hip

Therapists are faced with choosing the most effective treatment strategies which will provide the best outcomes within the allotted time for elderly clients. This course will enable clinicians to enhance their skills in diagnosing and treating spine, pelvis and hip pain using best practices and the latest evidence available. Emphasis will be on clinical problem solving and techniques (select, prioritize and deter-

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mine frequency and reasonable outcomes and discharge criteria) for common geriatric orthopedic pathologies. Instructor: Chad Cook. **Contact:** Education Resources, Inc., 800-487-6530; 508-359-6533 (within MA); or www.educationresourcesinc.com

JULY 15-16, 2011 — **CHICAGO, IL**
AUG. 5-6, 2011 — **LAS VEGAS, NV**
OCT. 21-22, 2011 — **NEW YORK, NY**

Secrets & Steps to Private Practice Success

Step-by-step instruction course on how to increase referrals, revenue, & reimbursement quickly and affordably! Perfect for Experienced Owners & Beginners. SECRETS INCLUDE: 1) Why an MD will stop referring, 2) Your front desk will make or break you, 3) Coding & Modifier Secrets to double your reimbursements, 4) Employee Leadership is Key, 5) Advertising Secrets & Templates, 6) Secret Promotions for Instant Business, 7) Best Equipment & Software. TESTIMONIALS: "You will kick yourself if you don't go." "Its so worth the money and time to come here", "It would be a MISTAKE not to take this course!" 100% Money-Back Guarantee. **Contact:** 800-801-4511; www.IndeFree.com for more locations.

JULY 15-17, 2011 — **MERCERVILLE, NJ**
SEPT. 23-25, 2011 — **JACKSONVILLE, FL**
NOV. 4-6, 2011 — **WHITE PLAINS, NY**

Vestibular Rehabilitation

This course will focus on the assessment of patient w/ vertigo & disequilibrium from vestibular causes. Material covered includes the neuroanatomy & neurophysiology of normal vestibular system, the various pathological conditions that result in vertigo or disturbances balance & the compensatory mechanisms available for recovery. Specific emphasis on assessment & Tx of unilateral & bilateral vertigo, central vestibular disorders & multisensory dizziness. This info applicable to geriatric patients as well as individuals w/CNS lesions such as multiple sclerosis, CVA & head injury. 3rd day of course is optional. Instructor: Richard Clendaniel. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530; www.educationresourcesinc.com

JULY 15-23, 2011 — **ST. LOUIS, MO**
AUG. 12-20, 2011 — **RED BANK, NJ**
SEPT. 17-25, 2011 — **CHICAGO, IL**

Lymphedema Therapy Certification/ Lymphedema Mgmt

This 135 hr lymphedema certification course combines 45 hrs of online home study & 90 hrs of classroom (lab) instruction: The most efficient & cost effective way to become lymphedema certified! UE lymphedema certification available. Pathophysiology, Diagnosis & DD taught by expert lymphedema physician. Lab instructors are the most experienced in the field. Approved for CEUs. Meets requirements to sit for Lymphology Assoc. of N. America (LANA) exam. Free post graduate services. Klose Training & Consulting; Guenter Klose, Certified Instr. since 1987, Kathy Francis, MD, Med. Director. **Contact:** 866-621-7888 (toll-free); info@klosetraining.com or www.klosetraining.com for dates & locations.

JULY 16-17, 2011 — **TAMPA, FL**
JULY 23-24, 2011 — **ATLANTA, GA**
AUG. 6-7, 2011 — **FT. LAUDERDALE, FL**

Edema-Differential Diagnosis & Treatment

This intensive two day course is designed to teach clinicians to differentiate between various edema etiologies and design effective treatment programs based on those findings. Topics include the evaluation of the arterial, venous, and lymphatic systems. Numerous treatment techniques will be covered, such as compression bandaging as well as hands-on introduction to manual lymphatic drainage. Over 80% of attendants rated this course Excellent, all others rated it Good. Cost: $350 for 16 hours. CEUs vary from state to state. **Contact:** JVB Enterprises, Inc., 888-328-6755; or www.teachtx.com for other courses offered in your area or for more information.

JULY 16-17, 2011 — **WASHINGTON, DC**
AUG. 20-21, 2011 — **SEATTLE, WA**
SEPT. 17-18, 2011 — **MINNEAPOLIS, MN**

Starting and Running a Pediatric Therapy Practice

This seminar presented by entrepreneur Vincent Mullins, MOT, OTR, will provide clear steps to open and run a pediatric OT/PT/ST private practice. All aspects of start-up and growth of the practice will be presented through personal experience and years of research and development. Both therapy and business portions will be discussed. 11 CE hours. Live video available for those unable to attend. **Contact:** 940-300-2299; or www.THERAPYSEMINARSLLC.com to register online.

JULY 17, 2011 — **CHICAGO, IL**
AUG. 8, 2011 — **LAS VEGAS, NV**

Advanced Billing, Coding, Collections and Audit-Proofing

There are more requests for refund, denials, audits, and reimbursement issues than ever before in the history of our profession. Also, are your therapists billing only 3 units while spending over an hour with patients? Is your documentation making you vulnerable? This course will help solve many of the problems confronted by most PT/OT practices today. Get the secrets to quicker payment, better reimbursement, appealing denials, audit-proofing, and more. TESTIMONIALS: "This is the best course I've ever attended on billing, and I've attended over 100. Take it!" 100% No-Risk Guarantee. **Contact:** (800) 801-4511; www.IndeFree.com

JULY 22-24, 2011 — **ORLANDO, FL**
SEPT. 23-25, 2011 — **ALBANY, NY**
DEC. 9-11, 2011 — **NEW ORLEANS, LA**

Dr. Carole B Lewis Presents: Clinical Geriatrics Orthopedics 2011

This entertaining and informative seminar describes age related changes and pathology, normative values, functional tools for every joint in the body and shows you how to track patient progress for reimbursement. In laboratory sessions, Dr. Lewis, a clinician, international lecturer and author teaches innovative mobilizations techniques, creative exercises and diagnosis specific protocols and efficient evaluations. 400+ page handout and over 5,000 evidence based references and endless evidence based treatment strategies. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JULY 22-24, 2011 — **HOUSTON, TX**
SEPT. 24-25, 2011 — **ARLINGTON, TX**
OCT. 21-22, 2011 — **STOUGHTON, MA**

Vestibular Rehabilitation

This evidence-based lab course will train clinicians in the practical management of dizziness. It will include instruction in anatomy and physiology, pathology, medical management, laboratory testing, performance of a detailed bedside/office examination and treatment recommendations. The application of VRT to a variety of practice settings (outpatient, acute care, SNF, ER) will be discussed. An emphasis will be placed on the management of unilateral, bilateral and central vestibular dysfunction and BPPV variants. There is the option of a third day of Advanced studies at certain locations. Instructor: Jeffrey Walter. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

JULY 23-24, 2011 — **HOUSTON, TX**

Kinesio Taping in Pediatrics and Adult Neurological Patients

Advanced Techniques and Problem Solving Level 3. Instructors: Patricia Martin and Audrey Yasukawa. Location: Texas Children's Hospital, Houston, Texas 77030. **Contact:** Mitzi Wiggin, 832-826-6107 for more information; e-mail: mmwiggin@texaschildrenshospital.org or register online: www.texaschildrenshospital.org/pmr and click on continuing education.

JULY 23-24, 2011 — **WINSTON SALEM, NC**
SEPT. 24-25, 2011 — **GREEN BAY, WI**
OCT. 15-16, 2011 — **LITTLE ROCK, AR**

Comprehensive Rehabilitation Strategies

Speaker: Doug Dillon, PT, GTC, Rehabilitation for our geriatric population is changing rapidly. Payment changes make it more challenging to deliver quality care for the rehabilitatively and medically complex older patient. This seminar, with its 350 page handout and 5000 references, provides a thorough approach to therapeutic strategies and goals, thereby preparing therapists with cutting-edge information, evaluation tools and treatment protocols for the complex geriatric patient. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JULY 23-24, 2011 — **BOONE, NC**
OCT. 15-16, 2011 — **LINCOLN, NE**

Postural Respiration

Clinicians will gain an appreciation for the postural influences of: rib torsion, asymmetrical oblique strength, inconsistent breathing patterns, habitual use of accessory respiratory musculature and a restricted diaphragm. The focus of this course will be to "balance" polyarticular muscular chains through focused functional assessment of the upper-half. Integrated treatments using manual therapy and non-manual techniques to restore respiratory and rotational functions of the trunk will be covered. Learn clinical assessment and management skills when treating diagnosis such as "fibromyalgia", thoracic outlet syndrome and shoulder dysfunction. Mention this ad to receive a 5% tuition discount. **Contact:** Postural Restoration Institute, 888-691-4583 (toll-free); www.posturalrestoration.com

JULY 24-26, 2011 — **ENGLEWOOD, NJ**
JULY 28-30, 2011 — **PORTLAND, OR**
AUG. 27-29, 2011 — **HOUSTON, TX**

Ambulation Interventions for The 0-3 Population

This course will focus on pre-and early ambulation in a population that is predisposed to rapid and dramatic changes: the birth to three populations. Typical and atypical preparation for and development of ambulation in the infant and toddler will be examined. The impact of biomechanics, the neuromuscular system, the sensory system, orthotics, tone management, and equipment will be integrated as participants learn to build intervention strategies to address ambulation early and effectively in infants and toddlers with diagnoses such as CP, developmental delay, prematurity and Down Syndrome. Instructor: Jan McElroy. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

JULY 29-30, 2011 — **INDIANAPOLIS, IN**
AUG. 5-6, 2011 — **KING, NC**
AUG. 12-13, 2011 — **OCEANSIDE, CA**

Integrating NDT, SI and Motor Learning in Children

Are the goals you are setting for the children you treat, realistic? Is the treatment approach the most effective to

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achieve the outcome you want? This workshop will enhance critical thinking skills to enable therapists to use a systematic approach to treating children with developmental challenges. Focus will be on problem solving to gain function for children with motor control, sensory processing and behavioral compromise. The unique approach will help therapists set realistic measurable goals, set priorities and determine frequency of treatment and exit criteria. Instructor: Lezlie Adler. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

JULY 30-31, 2011 — DUBUQUE, IA
AUG. 6-7, 2011 — TUSCALOOSA, AL
AUG. 13-14, 2011 — CHEYENNE, WY

Rehab of Persons with Common Medical Pathologies

Speaker: Steven Tepper, PhD, PT. This entertaining lecture provides take home information on rehabilitation of MI/CHF, COPD, Diabetes, Renal Failure, Obesity, Peripheral Arterial Disease and Deep Vein Thrombosis seen in a wide variety of settings: acute, subacute, long-term care, home health, cardiac and pulmonary rehabilitation and fitness/wellness clinics. Specific evaluations, functional tools, interventions and limitations to functional activities, will be covered in a case study format and lab sessions utilizing the Guide to Physical Therapy Practice. Stay up to date with the latest research findings with this dedicated and talented educator. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JULY 30-31, 2011 — DALLAS, TX
OCT. 8-9, 2011 — RICHMOND, VA
DEC. 3-4, 2011 — CHERRY HILL, NJ

Cancer Rehabilitation

Speaker: Nicole Stout, MPT, CLT-LANA. Current evidence-based rehabilitation strategies for individuals undergoing treatment for cancer, survivorship from cancer, or facing metastatic disease will be described in detail: exercise prescription, contradictions and precautions with exercise & modalities. Identify in a problem based format, with group interaction, using real case examples; the latest in evaluation, treatment and progression of care. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

JULY 30-AUG. 7, 2011 — FREEHOLD, NJ
AUG. 6-14, 2011 — DURHAM, NC
AUG. 20-28, 2011 — LOS ANGELES, CA

Lymphedema Therapy Certification

The Norton School of Lymphatic Therapy's Advantage Optimal Access Format is a blended live & web-based certification program producing LANA-eligible lymphedema therapists in only 9 continuous days. Only 5 workdays and 2 weekends make this course the most sensible, cost-effective, unmatched choice. Save large expenses on staff coverage, travel, hotel and meals. Take our online Virtual Tour and compare to other schools! This course teaches: Manual Lymph Drainage (MLD) & Complete Decongestive Therapy (Vodder/Foeldi Tech) covering 135 hours, basic and advanced MLD, bandaging & Tx protocols, Tx of primary & secondary lymphedema, extremity & non-extremity lymphedema. All Norton School instructors are recognized national experts and are available via e-mail & phone consultation for Tx of complex patients. We offer Advanced Training Programs, Reviews, Bi-Annual Conferences, Specialized Training Videos & free lifetime listing in our Therapist Referral Database. Multiple courses offered per month nationally. Inquire about hosting a course! MD, RN, PT, OT, PT & OT Assistants, Nurses & MTs qualified. The Norton School is recognized by FPTA, NJ, SBPTE, TPTA, AOTA & NCBTMB for CEUs. Senior Faculty: Steve Norton, MLD/CD, CLT-LANA; Andrea Cheville, MD, Medical Director. **Contact:** 866-445-9674 (toll-free); 866-854-7800 (fax); info@NortonSchool.com or www.NortonSchool.com

JULY 31-AUG. 1, 2011 — SALEM, OR
AUG. 20-21, 2011 — MINNEAPOLIS, MN
OCT. 15-16, 2011 — CHAPEL HILL, NC

Pelvic Floor Restoration

Advanced lecture and lab course designed to assist clinicians with complex patients struggling to improve. Gain an appreciation for the influences of an asymmetrical pelvis and how this imbalance contributes to pelvic floor dysfunction. We will explore in detail the function of the pelvic inlet and outlet as it relates to anatomy, respiration, and asymmetry in a multiple polyarticular chain system. Learn to restore pelvic and respiratory neutrality through a PRI treatment approach. Treatment integration to assist with the following pelvic floor dysfunctions will be discussed: incontinence, hypertonicity, prolapse and sacro-iliac instability. Mention this ad to receive a 5% tuition discount. **Contact:** Postural Restoration Institute, 888-691-4583 (toll-free); www.posturalrestoration.com

AUG. 4-5, 2011 — BATON ROUGE, LA

Wound Management Strategies for Patients with Lymphedema

The Academy of Lymphatic Studies has pioneered lymphedema management in the U.S. since 1994. The Academy offers a variety of advanced and refresher programs specifically tailored to the continuing education of Health Care Professionals. Wound Management Strategies: this intensive 2-day course is designed to further the knowledge of therapists in the management of chronic wounds. Upon completion of this course, therapists will be able to properly identify wound characteristics consistent with venous insufficiencies in combination with lymphedema, and understand how to effectively apply the different components of MLD/CDT for patients with integumentary dysfunction associated with lymphedema. Discounts are available for APTA & AOTA members. **Contact:** 800-863-5935 for a free brochure; academy@acols.com or www.acols.com

AUG. 5-6, 2011 — ENGLEWOOD, NJ

Nothing Else Matters If You Can't Breathe!

This course focuses on the primary and secondary cardiopulmonary impairments that limit therapeutic and patient outcomes in various settings from the Intensive Care Unit to Long Term Care to Outpatients, school setting and to Home Care. It includes examination and patient care management of cardiopulmonary disease and dysfunction. The physiological and evidence basis of interventions will primarily focus on practical aspects relating to all patients and clients. The title of the seminar tells it all, nothing else matters if you can't breathe! Instructor: Donna Frownfelter. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

AUG. 6-7, 2011 — ATLANTIC CITY, NJ
OCT. 14-15, 2011 — AUSTIN, TX
NOV. 5-6, 2011 — LAS VEGAS, NV

Dr. Carole B Lewis Presents: Clinical Geriatric Neurology

Carole B. Lewis, PT, DPT, GCS, MSG, MPA, PhD, FAPTA, presents Geriatric Neurology. This entertaining lecture provides take home information on cutting edge assessment and treatment of older clients with Parkinson's disease, stroke, gait, balance disorders, and pain problems with a 300+ page handout with over 5,000 current medical references. Use these treatment techniques and evaluation tools to work smarter not harder. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

AUG. 12-13, 2011 — **SACRAMENTO, CA**
SEPT. 16-17, 2011 — **SPOKANE, WA**
NOV. 4-5, 2011 — **TRUMBULL, CT**

Assessment and Treatment of Torticollis

Has the clinical presentation of torticollis changed? Novice and experienced clinicians will explore the effects of torticollis, sleep posture and increased use of positional devices on infant postural development. Functional, clinically oriented evaluation and evidenced based treatment strategies for infants through 2 years of age will be provided. Clinical pathways of management of infant head shape, diagnostic procedures and surgical intervention will be appraised. Learning opportunities will transpire through lectures, group problem solving and video review. Instructor: Cindy Miles. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

AUG. 12-13, 2011 — **TRUMBULL, CT**
OCT. 14-15, 2011 — **CEDAR KNOLLS, NJ**
NOV. 11-12, 2011 — **SACRAMENTO, CA**

Children's Brains and Evidence for Intervention

Contemporary theories of neuroplasticity especially as related to motor control, motor learning, and motor development will be presented. Emphasis will be on applying empirical evidence to pediatric evaluation and intervention strategies. Videotapes of treatment sessions will be used to illustrate major points. Controversial issues related to spasticity, handling techniques, and early gait training will be addressed, as well as cognitive and perceptual issues related to praxis. Instructor: Patricia Montgomery, PT, PhD, FAPTA. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

AUG. 19-20, 2011 — **HARTFORD, CT**
SEPT. 16-17, 2011 — **RENTON, WA**
OCT. 28-29, 2011 — **CHICAGO, IL**

Brachial Plexus Injuries Treatment: Infant thru Teen

Do you assess and treat pediatric patients with Obstetrical Brachial Plexus Injuries? This workshop will provide you with the comprehensive knowledge you need to be able to confidently perform comprehensive examinations, develop attainable goals and choose the most effective therapeutic strategies and make surgical referrals for each stage of recovery throughout infancy, childhood, and teen years. Instructors: Cindy Servello & Pia Stampe. **Contact:** Education Resources, Inc., 800-487-6530; 508-359-6533; www.educationresourcesinc.com

AUG. 19-20, 2011 — **INDIANAPOLIS, IN**
OCT. 14-15, 2011 — **SAVANNAH, GA**

Intensive Orthopedics

Speaker: Sandy Shelton, PT, GTC. Take home innovative evaluation and treatment ideas for total joint arthroplasties and traumatic fractures. Learn clinically useful and cutting edge protocols, critical paths and ways of working with difficult patients. Diagnoses specific evaluations will be demonstrated. Utilize these tools to work smarter, not harder. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

AUG. 19-20, 2011 — **ATLANTA, GA**
OCT. 14-15, 2011 — **ENGLEWOOD, NJ**
DEC. 9-10, 2011 — **LAUREL, MD**

Driving Neuroplastic Change in Stroke Survivors

Designed to take the complexity and guesswork out of planning treatment, this seminar focuses on a new perspective on stroke recovery. Based on principles proven to drive neuroplastic change in stroke survivors, this seminar will provide the tools to incorporate leading-edge, research-based recovery options. Included will be an in-depth look at a variety of cutting edge strategies, technologies and treatment options to aid stroke survivors in reaching the highest level of potential recovery, such as modified constraint induced therapy, gaming technologies, and motor imagery techniques, among others. Instructors: Stephen Page and Peter Levine. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

AUG. 20-21, 2011 — **BOISE, ID**
SEPT. 24-25, 2011 — **FRESNO, CA**
OCT. 15-16, 2011 — **BOSTON, MA**

Taking Balance To the Limits

Speaker Janene Barber, PT, GTC, has taught and treated extensively in this area with astounding results. This course goes beyond all you have learned about the effects of speed, strength and range of motion limitations as causes for balance dysfunction. You will leave with an in depth knowledge and skill in postural dyscontrol, somatosensation and vestibular arenas. Take home innovative usable evaluation and treatment techniques that will dramatically change your practice. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

AUG. 20-21, 2011 — **TOLEDO, OH**
SEPT. 24-25, 2011 — **MIAMI, FL**
OCT. 22-23, 2011 — **LINCOLN, NE**

Safe Steps: Making Gait, Balance Assessment, & Treatment

Speaker: James C. Wall, BSC, MSc, MEd, PhD, presents Safe Steps: Making Gait and Balance Assessment and Treatment Worth It. This seminar reviews the major changes commonly seen in the elderly, which can contribute to problems with gait, balance, and subsequent loss of independence. Evaluations tools, objective techniques to measure functional mobility tasks and evidence-based treatment strategies will be covered. **Contact:** 877-794-7328 (toll-free); or www.greatseminarsandbooks.com

AUG. 26-27, 2011 — **PORTSMOUTH, NH**
SEPT. 23-24, 2011 — **FORT WAYNE, IN**
OCT. 21-22, 2011 — **ROCKFORD, IL**

Yoga and Pilates Therapy for The Child with Special Needs

Learn how to integrate pilates and yoga exercise techniques in to your therapeutic intervention. These techniques will be applied to the child with special needs from birth to school age with diagnosis of sensory impairments, tone issues, autism, ADHD and spina bifida. Instruction will be completed on how to include these techniques into your everyday practice in pediatric rehabilitation. You will be able to design family friendly home programs for your clients and participate in labs so that you can better appreciate the use of these techniques. Instructor: Angelique Micallef-Courts. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

AUG. 26-27, 2011 — **MINNEAPOLIS, MN**
OCT. 13-14, 2011 — **WATERTOWN, MA**

Pediatric Sensory Assessments To Guide Treatment

As a pediatric therapist, do you find yourself asking: Am I getting the results I expected? Am I doing what I think I am doing? I've completed my assessment, now what? How do I know if what I am doing works? This course attempts to answer these questions in key pediatric practice areas: sensory-based assessments, Ayres Sensory Integration®, interventions for children on the autism spectrum, and mandates for incorporating evidence into practice. It will also cover which assessment tool is most appropriate for school and clinic based therapists as well as strategies to coordinate services. Instructor: Tara Glennon. **Contact:** Education Resources, Inc., 800-487-6530; 508-359-6533 (within MA); www.educationresourcesinc.com

AUG. 26-27, 2011 — **AURORA, IL**
OCT. 29-30, 2011 — **GREENWOOD, SC**

Mobilizing the Medically Complex Acute Care Patient

Therapists are often challenged when presented with complex acute care patients who may have cardiovascular and/or pulmonary dysfunction or complications in addition to other medical conditions. Mobilizing these complex patients safely requires integration of the implications of lab values, diagnostic test results, patient history, medications and equipment. Signs of patient instability and when and how to modify or terminate treatment will be discussed. Instructor: Ellen Hillegass, EdD, PT, CCS, FAACVPR. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

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SEPT. 9-10, 2011 — **WHITE PLAINS, NY**

Comprehensive Assessment and Treatment of the Shoulder

This lab seminar is an evidence based approach to examination and treatment of the conditions affecting the shoulder complex. This will address shoulder pain and overall function for adults with Impingement conditions, rotator cuff tendonitis, bicipital tendonitis, subacromial bursitis, adhesive capsulitis, frozen shoulder Pain, arthritis, overuse syndromes, scapular syndromes, shoulder instability, thoracic outlet syndrome, radiculitis/peripheral nerve entrapment. This seminar will cover differential diagnosis of this region and address cervico-thoracic contribution to the shoulder condition. The treatment approach will integrate the best evidence in a clinically relevant manner. Instructor: Megan Donaldson. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

SEPT. 9-10, 2011 — **ENGLEWOOD, NJ**
OCT. 15-16, 2011 — **NEW BERN, NC**
NOV. 4-5, 2011 — **MINNEAPOLIS, MN**

Geriatric Neurology: Falls Prevention and Balance

Are the interventions you are using to improve balance in geriatric and neurologic patients the most effective, up-to-date and relevant for your individual patient? This course will teach you to select and use the most appropriate tools to assess the risk for falls, evaluate function and assess balance. Therapists will learn to differentiate normal aging from pathology and develop effective evidence based treatment strategies to improve functional balance outcomes to optimize the environment. (Medically complex patient-Stroke-Dementia-Balance Elderly-Frail Elderly). Instructor: Carole Burnett. **Contact:** Education Resources, Inc., 508-359-6533; 800-487-6530 (outside MA); www.educationresourcesinc.com

SEPT. 10-11, 2011 — **INDIANAPOLIS, IN**
SEPT. 10-11, 2011 — **PHILADELPHIA, PA**
SEPT. 10-11, 2011 — **RALEIGH, NC**

KinesioTaping - KT1/KT2

More dates and locations, and KT3 Certification courses listed online. KTA approved seminar. Learn the fundamental and advanced concepts, corrective techniques of the KinesioTaping Method, and the unique properties and use of KinesioTex Tape. Lab sessions provide ample time to practice kinesiotaping skills for upper and lower body applications. **Contact:** Rehab Education, LLC, 845-368-2458; info@RehabEd.com or www.RehabEd.com for details and registration.

SEPT. 15-18, 2011 — **ATLANTA, GA**
SEPT. 30-OCT. 3, 2011 — **DETROIT, MI**
OCT. 6-9, 2011 — **SAN DIEGO, CA**

Recovering Function NDT Courses Intro, Advanced, Cert

Recovering Function's series of "hands-on" NDT courses provides you with a step-by-step framework of problem-solving strategies and manual cues for assessing potential and individualizing functional outcomes when implementing interventions for your adult clients with hemiplegia. Audience: OTs, COTAs, PTs, PTAs. Cathy Runyan, OTR/L, & Peggy Miller, PT, NDTA, Inc. Certified Instructors. Offered nationwide. **Contact:** Recovering Function, 408-268-3691; or www.RecoveringFunction.com for a complete brochure of intro, advanced, and cert courses as well as information about additional course dates/locations, group rates & free registrations when hosting courses at your facility.

WWW.ADVANCEWEB.COM/JOBFAIRS

SEPT. 22-25, 2011 — **HOUSTON, TX**
OCT. 22-25, 2011 — **HOUSTON, TX**
NOV. 10-13, 2011 — **HOUSTON, TX**

NDT/Bobath Certificate Course

In Management and Treatment of Adults with Hemiplegia. Instructors: Kay Folmar. Location: Texas Children's Hospital, Houston, Texas 77030. **Contact:** Mitzi Wiggin, 832-826-6107 for more information; e-mail: mmwiggin@texaschildrenshospital.org; or register online: www.texaschildrenshospital.org/pmr and click on continuing education.

SEPT. 24-25, 2011 — **ALBUQUERQUE, NM**
OCT. 24-25, 2011 — **URBANA, IL**
NOV. 5-6, 2011 — **PHILADELPHIA, PA**

Home Health Rehabilitation

Speaker: Carol Schunk, PT, PsyD. Home Health is a unique physical therapy practice setting. Not only are there clinical issues but being in the patient's home environment makes the delivery of service very different than in an outpatient or inpatient facility. This course will provide both clinical information relevant to those being treated in their home as well as the psychological aspects of dealing with families and caregivers including evaluation tools for balance, function, cognitive ability and environmental hazards presented to allow the therapist to develop an appropriate plan of care. **Contact:** 877-794-7328 (toll-free); www.greatseminarsandbooks.com

ABOUT CALENDAR:
Make sure your important event appears in the advance calendar. To place a listing or an attractive display ad in this section, call 800-355-5627 or fax (610) 278-1422. **Deadline** is Tuesday at noon, EST.

Supplemental Health Care
Nationwide

Supplemental Health Care is a national provider of customized workforce solutions for health care facilities and professionals. The company is comprised of more than 60 local offices in major U.S. markets and four national travel divisions: travel nursing, direct hire, travel allied and locum tenens.

For more than 25 years, Supplemental Health Care has helped companies recruit and place a variety of health care professionals on assignments, including physical therapists, nurses, occupational therapists, speech language pathologists and other health care specialties. Professionals work in a wide variety of facilities, such as skilled nursing facilities, hospitals, home health, outpatient rehab facilities and long-term care facilities.

Supplemental Health Care is currently seeking physical therapists and physical therapist assistants to staff open positions with partner facilities across the United States. Candidates are required to meet all state and workplace requirements prior to starting a new assignment. Thorough background checks ensure employees have completed their required physical therapy exams and have received any compliance, certifications or screening requests determined by facility partners.

Travel assignments are coordinated to meet workforce needs of facility partners. In general, assignments are approximately 13 weeks long; however, many assignments vary in length from four to 26 weeks. The company's Travel Therapy division staffs health care professionals throughout the United States, including Alaska and Hawaii.

Supplemental Health Care provides an array of benefits for employees, also known as Supplemental Advantages. Benefits include competitive salaries, a full range of health, dental and vision insurance options, 401-k savings plan, retirement plans and continuing education support options.

In addition, the company's unique Our Rewards Program allows employees to earn points for every hour worked. Points can be redeemed for more than 3,500 merchandise options via an online portal. Gifts range from small games and clothing items to greenhouses, exercise equipment and electronics.

Also, the Helping Hands Referral Program recognizes employees that identify new talent. Employees that refer other health care professionals to Supplemental Health Care receive $1 for every hour that the referred employee works for the company.

Supplemental Health Care fosters long-term career growth. Recruiters are specially trained to assist employees in securing assignments that fulfill their personal and professional goals. With each new assignment, employees have the opportunity to experience new health care environments, as well as learn new systems and technology to broaden their professional skill sets. ■

To learn about Supplemental Health Care and its physical therapy travel opportunities, visit www.supplementalhealthcare.com or call 1-888-800-8744.

joint rehab continued from page 35

- Relative flexibility is important—compare to opposite limb to determine need for mobilizing the involved joint;
- Joint mobilizations for symptom relief—the thoracic spine is more difficult to self-mobilize and is often the first set of joints to begin to stiffen after microtrauma.[5]

In addition, use pain modalities as needed, and use splinting/orthotics for alignment correction, including resting splints for painful hand conditions and/or orthotic shoe inserts to reduce overpronation. Use taping or bracing for stability during activity and heel lifts for significant leg length discrepancies.

As discussed, hypermobile individuals may have no pain complaints and may actually find hypermobility an asset if they participate in activities such as dance or gymnastics. When problems do exist they may be as simple as minor muscle strains or as involved as multijoint chronic pain that impairs quality of life.

Many experts are concerned that JHS is an underdiagnosed cause of pain syndromes. Even though individuals are not likely to present to your clinic already diagnosed with JHS, you will most likely encounter these individuals, either because joint laxity coexists with or underlies their current musculoskeletal injury or condition. When treating a musculoskeletal condition, you should routinely screen for JHS.

If you suspect JHS in your patient, you can judiciously alter your intervention. Again, patient (and referral source) education may be the most important intervention. ■

References are available online at s under the Resources tab.

Tracy D. Harper is a clinical manager with Excel Physical Therapy & Fitness at the Sports Medicine Institute in Pottstown, PA.

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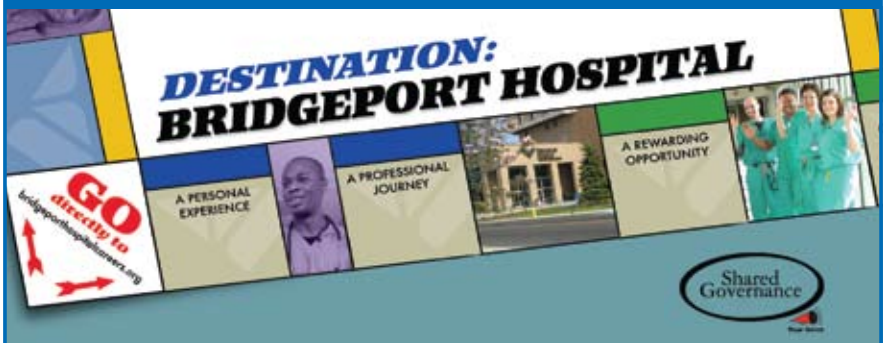

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Best Companies to Work for in New York, SHRM (2011)
50 Best Places to Work in New York City, *Crain's New York Business* (2010)
50 Best NonProfit Organizations to Work For, *The NonProfit Times* (2011)

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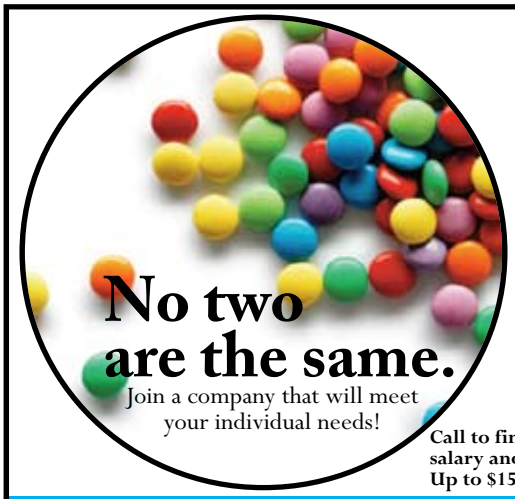

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1. Actigraphy-Measured Sleep Characteristics and Risk of Falls in Older Women *Arch Intern Med.* 2008; 168(16):1768-1775.

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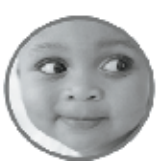

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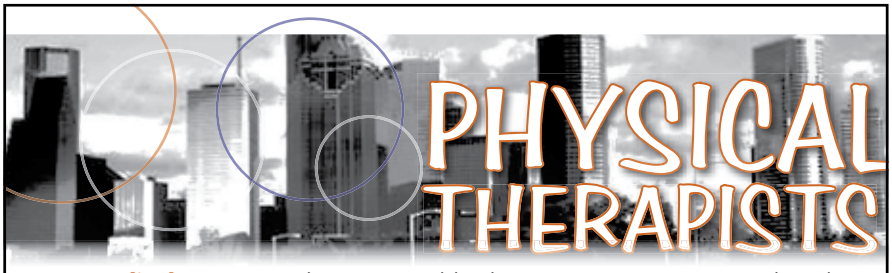

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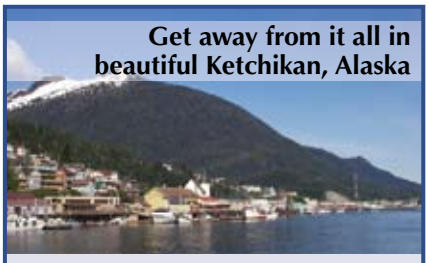

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CARDINAL	MAROON	ASH
LIGHT STEEL		

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#14436 Physical Therapy
#14580 Physical Therapist
#14441 Physical Therapist Assistant

Women's Colors

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NAVY	BLACK	LIGHT STEEL
ASH	DEEP ROYAL	DEEP RED
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TRUE NAVY/ WHITE
LIGHT PINK/ WHITE
TRUE NAVY/ GOLD
BLACK/WHITE

PORT AUTHORITY SIGNATURE

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#17426 Blank
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PALE PINK
BLACK
WHITE

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MAROON
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BLACK
OYSTER
WHITE

NIKE GOLF

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NAVY/WHITE
TRUE ROYAL/ WHITE
WHITE/BLACK

OGIO

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VOLTAGE BLUE/BLACK
BLACK/ DIESEL GRAY

PT Rocks

Ⓐ

Ⓑ

Ⓒ

Ⓐ Unisex "PT Rocks" Tee

100% preshrunk heavyweight cotton. **Relaxed fit** *Black.*
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18" x 24". Heavyweight premium luster photo paper. **#13344**
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$9.99

Ⓔ Gift Pack

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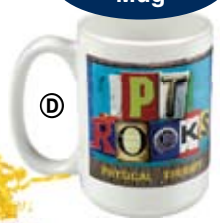
Personalize Mug



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NEW

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Personalize

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No Limits

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Ⓜ Unisex "Property of" Sweatshirt

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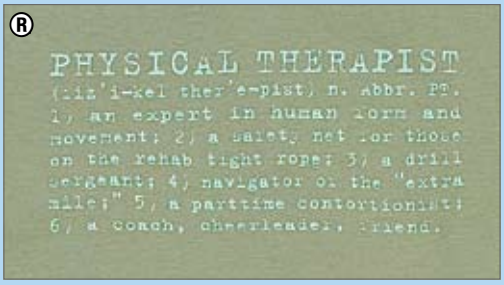

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Ⓢ Women's & Men's "Party Like a PT" Tees

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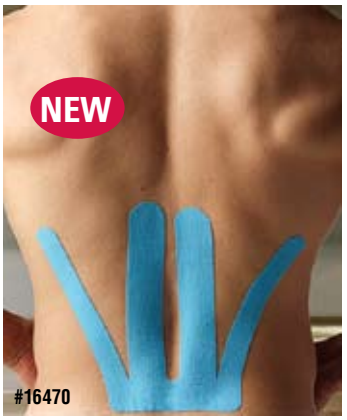

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